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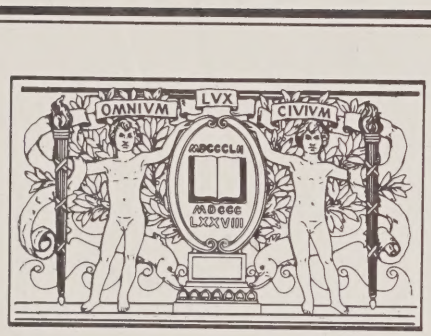

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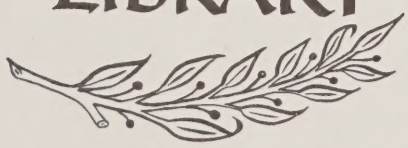

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A SURVEY OF THE DOWNTOWN RESIDENTIAL DEVELOPMENT POTENTIAL

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Jacob Schaffer

Boston Redevelopment Authority
Research Department

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Table of Contents

		Page
A.	INTRODUCTION	1
	Introduction to Building Condition Survey	1
	Downtown Districts and Boundaries of Survey	1
B.	DOWNTOWN BUILDING CONDITION SURVEY	5
	The Bulfinch Triangle District	5
	Custom House District	9
	Tremont District	15
	Theatre District	20
	Chinatown	25
	Leather District	30
	Bay Village	35
	Boylston Street	40
	St. Botolph Street	45
	Fort Point Channel	49
	Turnpike Air Rights	54
C.	DOWNTOWN DISTRICTS AND DEVELOPMENT ALTERNATIVES	55
	Alternative Horizons on the Residential Development	55
	The Bulfinch Triangle District	59
	Custom House District	69
	Tremont District	78
	Theatre District	82
	Chinatown	89
	Leather District	95
	Bay Village	103
	Boylston Street	107
	St. Botolph Street	112
	Fort Point Channel	115
	Turnpike Air Rights	122
D.	GENERAL NOTES AND REMARKS	128
	A Short Analysis of the Findings	128
	Issues Upcoming	128
	Next Steps; Analysis of Economic Feasibility	128
	Case Study	131
	DATA SOURCES FOR IMPACT ASSESSMENT	133

A. INTRODUCTION

Introduction to Building Condition Survey

The survey was performed on-site, with visual inspection, from the public way or nearest yard. It concentrated on the condition of roofs, porches, doors, exterior painting, frames, windows, gutters, steps, etc. Then, relative to the general impression from the exterior's facade, the buildings were classified in five categories, as follows:

A. Building appears in very good condition and does not need any work.

B. Building appears in good condition; needs a paint job or a roof job.

C. Building appears in fair condition. Needs several repairs of a major or minor nature--roof, gutters, porches, painting--but not necessarily all.

D. Building appears in poor condition. Needs many major and minor repairs and possibly a total rehabilitation.

E. Building appears in very poor condition. Appears structurally unsound. Has very many major and minor repair needs. Does not appear economically feasible to rehabilitate. The "E" condition for "historical buildings"* can be seen as "D" condition with more elements to rehabilitate on the whole building.

The condition of the buildings was recorded on maps of the City of Boston "Topographic and Planimetric Survey," 1:100.

Downtown Districts and Boundaries of Survey

1. Bulfinch Triangle District--bounded by Causeway, Haverhill, Merrimac and Market Streets.

2. Custom House District--bounded by Kilby, Batterymarch, High, Central Artery and State Streets.

---

* Historical building: A building considered in the first three categories by the Landmark Commission or for the National Register.

3. Court-Washington-West District--bounded by West, Tremont, Court and Washington Streets.

4. Theatre District--bounded by West, Tremont, Boylston, Charles Street South, Washington, Kneeland, Knapp, Hersey, Harrison, Hayward and Washington Streets.

5. Leather District--bounded by Lincoln, Kneeland, Atlantic and Essex Streets.

6. Chinatown District--bounded by Essex, Hudson, Broadway, Washington, south Oak, east Tyler, north Kneeland, Knapp, Beach and Hersey Streets.

7. Bay Village District--bounded by Stuart, Charles Street South, Tremont, Marginal Streets, the Turnpike, and Columbus Avenue.

8. Boylston District--bounded by Arlington, St. James, north Boylston Streets, Massachusetts Avenue, and Newbury Street.

9. St. Botolph District--bounded by Huntington Avenue, Gainsborough, Carleton Streets and Massachusetts Avenue.

10. Fort Point Channel--bounded by Northern Avenue, B, Sobin Park, Richards Streets and Fort Point Channel.

11. Turnpike Air Rights--Parcels C and D.

Maps

M.A.	Boston Downtown--Survey Areas
M.A.1	Bulfinch Triangle
M.A.2	Custom House District
M.A.3	Court-Washington-West
M.A.4	Theatre District
M.A.5	Leather District
M.A.6	Chinatown
M.A.7	Bay Village District
M.A.8	Boylston Street
M.A.9	St. Botolph Street
M.A.10	Fort Point Channel
M.A.11	Turnpike Air Rights

M.A.

RESIDENTIAL DEVELOPMENT POTENTIAL IN DOWNTOWN

1. BULFINCH TRIANGLE
2. CUSTOM HOUSE DISTRICT
3. TREMONT DISTRICT
4. THEATRE DISTRICT
5. CHINATOWN
6. LEATHER DISTRICT
7. BAY VILLAGE
8. BOYLSTON STREET
9. ST. BOTOLPH STREET
10. PORT POINT CHANNEL
11. TURN PIKE AIR RIGHTS

NORTH
STATION
BEVERLY
LOVEJOY
PL.
ST.
NO. WASHINGTON
MEDFORD
ST.
JOHN
COTTING
BILLERICA ST.
STREET
WAY
HAVERHILL
CANAL
FRIEND
PORTLAND
LANCASTER
1
2
3
4
5
6
7
8
STANIFORD
STREET
LYNDE ST.
CHARDON
NEW
HAWKINS ST.
BOWKER ST.
SUDBURY
TEMPLE
RIDGEWAY
LANE
DERNE ST
BOWDOIN
STREET
ASHBURTON PL
BULFINCH TRIANGLE
M.A.1.

B. DOWNTOWN BUILDING CONDITION SURVEY

The Bulfinch Triangle District

The Bulfinch Triangle District (BTD) is composed of eight blocks and bounded by Haverhill, Causeway, Merrimac and Market Streets. The highest building is a 9-story building. The other average heights of the blocks are as shown in the following table:

Table 1

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	3	5
2	6	6
3	6	5
4	6	6
5	6	5
6	4	4
7	6	4
8	3	3

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in fair condition, but there are rehabilitated buildings all over the district and others in rehabilitation now. All the renewed buildings are for offices or retail use. There is a relatively large portion of vacant lots used for parking.

The ratio footprint area/lot area is near 1.0. The following tables present the buildings' condition of the blocks in the district (# of block on map # A1): Building Conditions Tables.

Table 2

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1	2			
2			1	
3	3			1
4				
5		2	3	
6				
7		1		
8	1			
9	1			

Table 3

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1				
2		1		
3				
4	1			
5		1		
6	4			

Table 4

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1			1	
2	1		1	
3	1	1	1	1
4		1		
5		1	1	1
6		1	1	

Table 5

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1				
2				
3				
4				
5				
6	3			

Table 6

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
1	1			
2				
3	1			
4			4	
5	2			
6	1			

Table 7

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
1				
2				
3				
4	7			

Table 8

BLOCK 7

No. of Stories	Conditions A/B	C	D	E
1	1		1	
2		1	1	
3				
4	2			
5				
6			1	1

Table 9

BLOCK 8

No. of Stories	Conditions A/B	C	D	E
1		1		
2				
3	1			

Table 10

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	4	1	1	0	6
2	1	2	3	0	6
3	6	1	1	2	10
4	4	1	4	0	9
5	2	4	4	1	11
6	8	1	2	1	12
7	0	1	0	0	1
8	1	0	0	0	1
9	1	0	0	0	1
Total	27	11	15	4	57

Table 11

SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
57	27	11	15	4
100%	47%	20%	26%	7%

As is clear from Table 11, only 47 percent of the buildings are in A/B condition and 33 percent are in poor or very poor condition.

As shown on map #B1, the buildings in fair (C) and poor/very poor (D/E) condition are mostly concentrated on the corner of Canal and Causeway Streets, on Causeway Street and on the intersection of Causeway and Frieden Streets. These are small buildings on small lots.

Vacant Lots

The total vacant lot area in the Bulfinch Triangle District is 71,671 square feet, divided into ten lots.* Using an 80 percent floor area for potential use leaves 57,337 square feet of footprint area.

CUSTOM HOUSE DISTRICT

M.A.2

The Custom House District

The Custom House District is composed of 14 blocks bounded by State Street, Fitzgerald Expressway and Batterymarch. The highest building is 18 stories (the Custom House). The other average heights of the blocks are as shown in the following table:

Table 12

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average No. of Stories
1	7	6
2	4	4
3	6	6
4	18	18
5	11	11
6	11	11
7	6	5
8	9	5
9	16	5
10	11	8
11	8	7
12	6	5
13	14	14
14	7	5

* The "Maximum and Average Number of Stories" are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.).

The buildings are in good condition and there are many vacant lots, generally used as parking lots.

The ratio footprint area/lot area is near 1.0. The following tables present the building conditions of the blocks in the district (No. of block on Map No. A2).

Table 13

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
2				
3				
4				
5	1			
6				
7		1		
8	3			

Table 14

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
2				
3	1			
4	8			

Table 15

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
2				
3				
4				
5				
6	1			

Table 16

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
2				
3				
4				
5				
6				
18	1			

Table 17

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
2				
11		1		

Table 18

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
2				
11	1			

Table 19

BLOCK 7

No. of Stories	Conditions A/B	C	D	E
2				
3				
4	2		1	
5	2	1	1	
6	1			1
7		1		

Table 20

BLOCK 8

No. of Stories	Conditions A/B	C	D	E
4		2		
5		1		
6				
7	1			
9	1			

Table 21

BLOCK 9

No. of Stories	Conditions A/B	C	D	E
4	2			
5	3			
6	2			
7				
14	1			

Table 22

BLOCK 10

No. of Stories	Conditions A/B	C	D	E
2				
3	1			
4	3			
5	1			
6	1			
7	1			
8				
9	1	1		
10				
11	2			

Table 23

BLOCK 11

No. of Stories	Conditions A/B	C	D	E
2				
3				
4	1	1		
5	1			
6				
7	1			
8	2			

Table 24

BLOCK 12

No. of Stories	Conditions A/B	C	D	E
2	1			
3				
4			1	
5	1		2	1
6	2		1	

Table 25

BLOCK 13

No. of Stories	Conditions A/B	C	D	E
10				
11				
12				
13				
14	1			

Table 26

BLOCK 14

No. of Stories	Conditions A/B	C	D	E
4	1	1		
5		1	1	1
6	3	2		
7	1			
8				

Table 27

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1					0
2	1				1
3	2				2
4	17	4	2		23
5	8	3	4	2	17
6	11	2	1	1	15
7	4	1			5
8	5				5
9	2				2
10					0
11	4				4
12					0
13					0
14	2				2
18	1				1
Total	57	10	7	3	77

Table 28

SUMMARY OF BUILDING CONDITIONS
(In Percent)

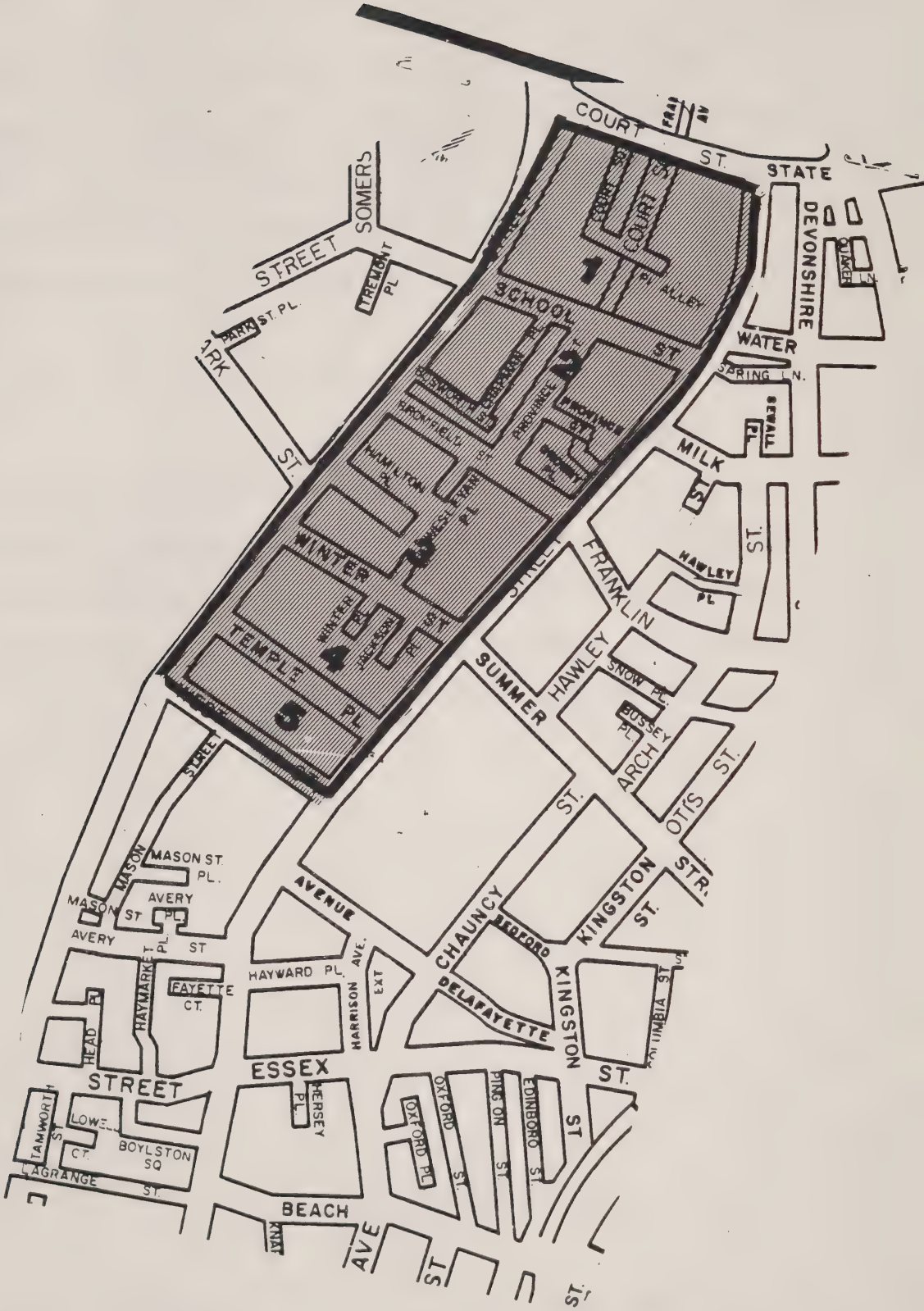
Total No. of Buildings	Conditions A/B	C	D	E
77	57	10	7	3
100%	74%	13%	9%	4%

From the last table it can be seen that 75 percent of the buildings are in good condition, 13 percent in fair condition and less than 13 percent in poor and very poor condition.

As seen on map No. B2, the buildings in fair (C) and poor condition (D/E) are mostly in blocks 7,8,12, and 14. These buildings are small buildings on small lot.

Vacant Lots

The total vacant lot area in the Custom House District is 41,951 square feet. From this land area, eliminating the lot area near the Expressway that will not be suitable for apartments, will leave 35,694 square feet. Taking an 80 percent of floor area for potential use, leaves 28,552 square feet of floor area.



TREMONT DISTRICT

Court, Washington, West District

This district is composed of five blocks and bounded by Court, Tremont, West and Washington Streets. The highest building is a new one, 40 stories. Of the old buildings, the highest is 14 stories. The other average heights of the blocks are as shown in the following table:

Table 29

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	12	5
2	14	6
3	10	6
4	12	6
5	12	5

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in fair condition, and there are only a few vacant lots, generally used for parking.

The ratio footprint area/lot area is near 0.8. The following tables present the buildings' condition in the blocks in the district (# of block on map # A3).

Table 30

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
2	3			
3	3			
4				
5	1			
6	3	1		
7				
11		1		
13	1			
40	1			

Table 31

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1		1		
2	1		1	
3	1	2	1	
4	1			
5	1			
6	1	1		
7	1			
8	2			
9				
10	1			
11	1		1	
14	1	1		

Table 32

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
2			1	
3	2	1		
4	1		2	
5		3	1	1
6	4			1
7	1			
8		4	1	
9	1			
10	1	1		

Table 33

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1	1			
2	1			
3	1		1	
4	2	3	1	1
5	2		1	2
6	1		1	
7	1			
8	1			
10		1		
11	2			
12	2			

Table 34

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
3	3			
4	1		1	
5	1		1	5
6	1		2	
7	1			
8				1
9				
10				
11	1			

Table 35

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total No. of Buildings
1	1	1			2
2	5				5
3	10	3	2		15
4	5	4	3	1	13
5	5	4	7	3	19
6	10	4	1	1	16
7	4				4
8	3	4	2		9
9	1	2			3
10	2	3			5
11	2	1	1		4
12	2				2
13	1				1
14	1	1			2
40	1				1
Total	53	27	16	5	101

Table 36

SUMMARY OF BUILDING CONDITIONS
(In Percent)

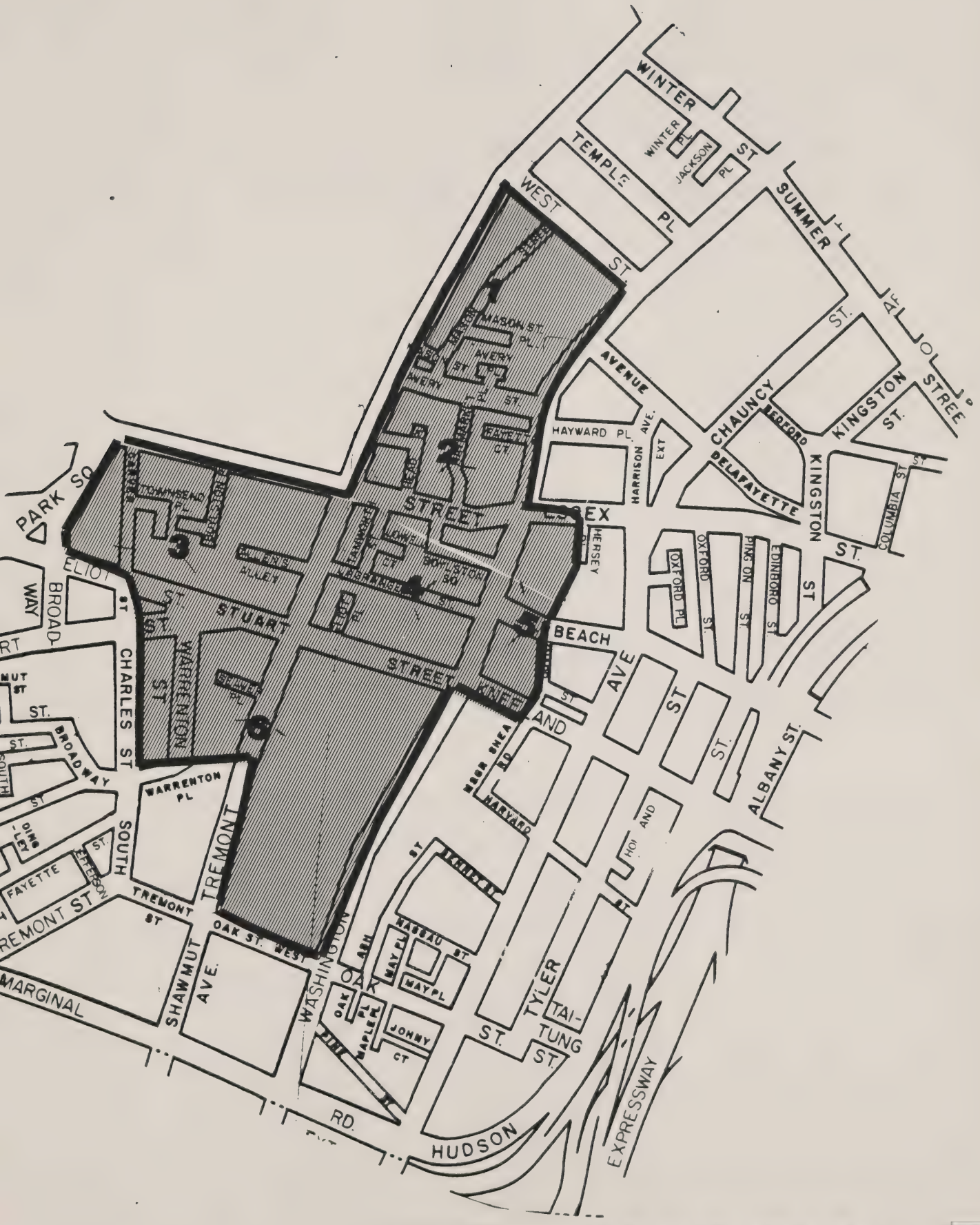
Total No. of Buildings	Conditions A/B	C	D	E
101	53	27	16	5
100%	52%	27%	16%	5%

From the last table it can be seen that 52 percent of the buildings are in good condition and 21 percent in poor or very poor condition.

As seen on Map No. B3 most of the buildings in poor and very poor condition (D/E) are concentrated in Block 4 and Block 5 and are small buildings on small lots.

Vacant Lots

The total vacant lot area in the district is only 5,371 square feet, divided in four lots.


WINTER
WINTER PL
JACKSON PL
ST
TEMPLE PL
WEST ST
SUMMER ST
AVENUE
HAYWARD PL
HARRISON AVE. EXT
CHAUNCY
BEDFORD
KINGSTON ST.
DELAFAYETTE
KINGSTON ST.
COLUMBIA ST
PARK SQ
ELIOT ST
BROAD WAY
CHARLES ST
WARRENTON PL
SOUTH TREMONT ST
FAYETTE
OAK ST. WEST
SHAWMUT AVE.
MARGINAL
WASHINGTON
OAK
MAY PL
NASSAU ST
JOHNY CT
TYLER ST
TAI-TUNG
HUDSON RD.
EXPRESSWAY
BEACH
AVE
ST
ALBANY ST.
HARVARD
OXFORD PL
OXFORD ST
PING ON ST
EDINBORO ST
HERSEY ST
MASON ST
STUART STREET
WARRENTON ST
CHARLES ST
BROADWAY
SOUTH
TREMONT
HOLLIS ST
HOLLIS
HOLLIS ST
HOLLIS
HOLLIS ST
HOLLIS

The Theatre District

The Theatre District is composed of six blocks bounded by West, Tremont, Boylston Streets, Park Square, Stuart, Carver, Warrenton, Hollis, Kneeland, Knapp Streets, Hersey Place, Essex and Washington Streets. The highest building is 22 stories (160 Tremont Street). The other average heights of the blocks are as shown in the following table:

Table 37

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	22	5
2	14	6
3	12	5
4	11	5
5	7	5
6	14	5

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in poor condition, and there are many vacant lots, all of them used as parking lots.

The ratio footprint/lot area is near 1.0. The following tables present the buildings' condition of the blocks in the district. (# of block on map # A4).

Table 38

BLOCK 1 -

No. of Stories	Conditions A/B	C	D	E
1				
2		2	2	
3			1	1
4	1	1		
5	1	1	1	
6	1		3	1
7	1	2		
8	1			
9				
10				
11	1			
22	1			

Table 39

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1				
2	1			
3				
4				
5				2
6		1	3	
7				
8				
9				
10		2	1	
11				
14		1		

Table 40

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1				
2		1		
3	1			
4	4	1		1
5	1	1	1	
6	3	2	1	
7	2	1		
8		7	1	
9				
10	1			
11		1		
12	1			

Table 41

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1	1	1	1	1
2	1		3	1
3	3	1	1	
4		1	1	3
5	2	1	1	
6	2		2	2
7				
8				
9	1			
10				
11	1			

Table 42

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1				
2	1			
3		1		1
4			1	2
5	1		3	1
6			2	
7				1
8				
9				
10				
11				

Table 43

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1				
2	1	2		
3	3			
4			1	
5	4		1	
6			1	
7				
8				
9	1			
10				
14		1		

Table 44

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	1	1	1	1	4
2	4	5	5	1	15
3	7	2	2	2	13
4	5	3	2	6	16
5	9	3	7	3	22
6	6	3	12	2	23
7	3	3		1	7
8	1				1
9	1	1			2
10	1	2	1		4
11	1	2			3
12	1				1
13					0
14	1	1			2
15					0
16					0
17					0
18					0
19					0
20					0
21					0
22	1				1
Total	42	26	30	16	114

Table 45

SUMMARY OF BUILDING CONDITIONS
(In Percent)

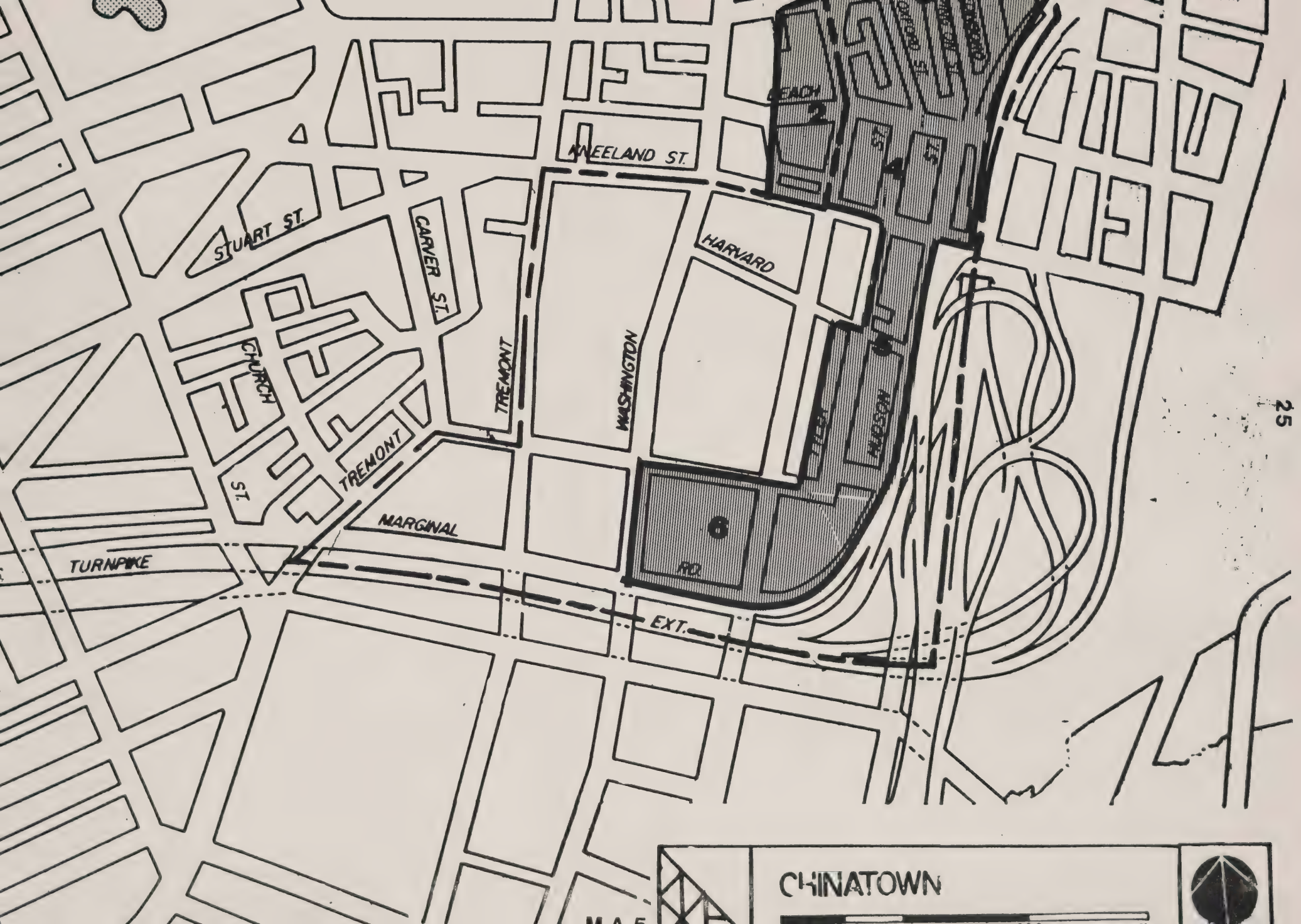
Total No. of Buildings	Conditions A/B	C	D	E
113	41	26	30	16
100%	36%	23%	27%	14%

From the last table it can be seen that only 36 percent of the buildings are in good condition and 40 percent are in poor and very poor condition.

As seen on map No. B4, the buildings in good condition are concetrated on Tremont, Boylston, Stuart and Kneeland Streets. The buildings in poor and very poor condition are all over the district.

Vacant Lots

The total vacant lot area in the Theatre District is 178,900 square feet. Taking a ratio of footprint area/lot area of 0.8 leaves for use 143,000 square feet.


KNEELAND ST.
STUART ST.
CARVER ST.
TREMONT
WASHINGTON
HARVARD
CHURCH
ST.
TREMONT
MARGINAL
TURNPIKE
EXT.
CHINATOWN

Chinatown District

The Chinatown District is composed of six blocks bounded by Essex, Hudson, Broadway, Washington, south Oak, east Tyler, north Kneeland, east Knapp, Beach, east Hersey Streets. The highest building is 14 stories. The other average heights of the blocks are as shown in the following table:

Table 56

Block No.	EXISTING HEIGHTS Maximum* No. of Stories	Average* No. of Stories
1	12	8
2	11	5
3	8	6
4	6	4
5	14	4
6	6	4

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in fair condition and there are many vacant lots, generally used as parking lots.

The ratio footprint/lot area varies from 0.5 to 1.0. The following tables present the building condition of the blocks in the district. (# of block on map # A5).

Table 57

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1	1			
2				
3				
4				
5				
6			2	
7				
8	1		1	
9				
10				
11		1		
12	1			

Table 58

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1	1			
2	2			
3	2			
4	3	2		
5	1			
6		1	2	
7				
8			3	
9				
10				
11		1		
12				

Table 59

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1	1			
2	1			
3	1	2	5	
4	10	2	2	
5	2	1	6	
6	1	7		
7				
8	1	2	1	

Table 60

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1	1			
2	3			
3	13	1	5	
4	2	13	2	
5		1	1	
6	2	1		
7		1		
8				

Table 61

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
1				
2		1		
3	9	4	1	2
4	14	11	1	
5				
6				
7				

Table 62

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
1				
2				
3	11	4	4	1
4	6	6		
5				1
6			1	
7		1		

Table 63

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	4				4
2	6	1			7
3	36	11	15	3	65
4	35	34	5		74
5	3	2	7	1	13
6	3	8	6		17
7		2			2
8	2	2	5		9
9					0
10					0
11		2			2
12	1				1
13					0
14	1				1
Total	91	62	38	4	195

Table 64

SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
195	91	62	38	4
100%	46%	32%	20%	2%

From the last table it can be seen that only 46 percent of the buildings are in good condition and 52 percent are in fair and poor conditon. As seen on map No. B6, the buildings in fair and poor condition are not concentrated in one block and their size varies.

Vacant Lots

The total vacant lot area in the Chinatown District is 52,731 square feet. Using an 80 percent of floor area for potential use, leaves 42,180 square feet of floor area.

LEATHER DISTRICT

M.A.6.

The Leather District

The district is composed of six blocks and bounded by Essex Street, Atlantic Avenue, Kneeland and Lincoln Streets. The highest building is an 11-story building. The other average heights of the blocks are as shown in the following table:

Table 46

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	8	7
2	6	6
3	8	6
4	11	8
5	8	5
6	11	6

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in good condition, and the vacant lots are used as parking lots.

The ratio footprint/lot area is near 1.0. The following tables present the condition of the buildings of all the blocks in the district (No. of on map # A5).

Table 47

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
2				
3				
4				
5				
6	1			
7				
8		1		
9				

Table 48

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
2				
3				
4				
5	5		1	
6	8			
7	1			
8				
9				

Table 49

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
2	1			
3			1	
4			2	
5	4	1	1	1
6		1	1	
7				
8	1			
9	2			

Table 50

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
7	1			
8			1	
11			1	

Table 51

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
5	7			
6	2			
8			1	

Table 52

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
3	1			
6	1		1	
11			1	

Table 54

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
2	1				1
3	1		1		2
4			2		2
5	21	2	1	1	25
6	12	1	2		15
7	2				2
8	1	1	2		4
9	2				2
11			2		2
Total	40	4	10	1	55

Table 55

SUMMARY OF BUILDING CONDITIONS
(In Percent)

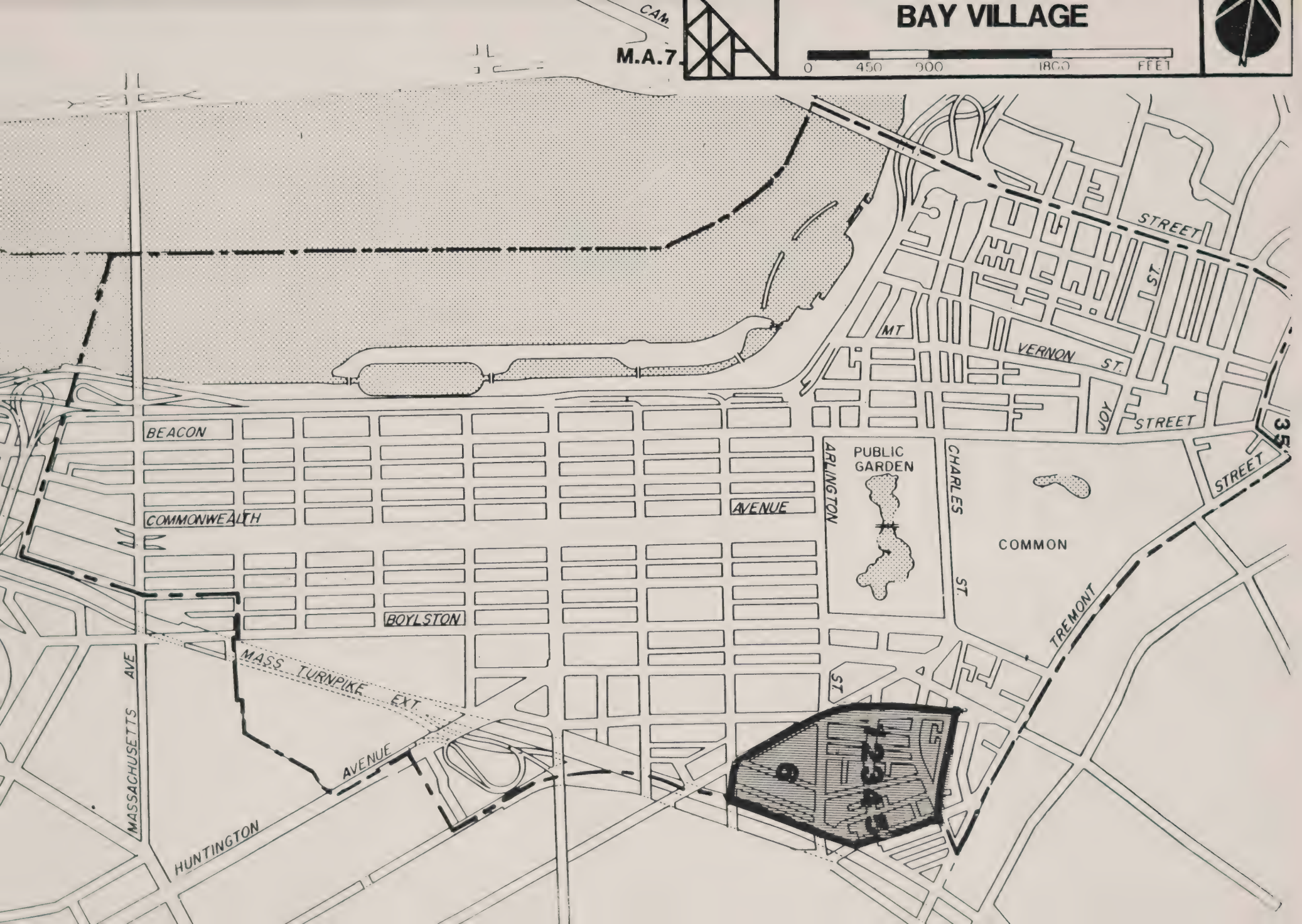
Total No. of Buildings	Conditions A/B	C	D	E
55	40	4	10	1
100%	73%	7%	18%	2%

From the last table it can be seen that 73 percent of the buildings are in good condition, and only 20 percent in poor and very poor condition.

As seen in map No. B5, the buildings in poor and very poor condition are concentrated in blocks 3 and 4 on Lincoln Street and Kneeland Street. These buildings are small buildings on small lot.

Vacant Lots

The total vacant lot area in the district is 28,281 square feet. Considering a foot print area of 80 percent, it leaves 28,552 square feet of floor area.


BAY VILLAGE
0 450 900 1800 FEET
M.A.7.
CAM
STREET
ST.
MT
VERNON ST.
VOA
STREET
35
STREET
BEACON
COMMONWEALTH
AVENUE
PUBLIC GARDEN
ARLINGTON
CHARLES ST.
COMMON
TREMONT
BOYLSTON
MASS TURNPIKE EXT
AVENUE
MASSACHUSETTS AVE
HUNTINGTON
ST.
25
9
13
14

The Bay Village District

The Bay Village District is composed of six blocks bounded by Stuart Street, Charles St. South, Tremont and Marginal Streets, the Turnpike and Columbus Avenue. The highest building is 15 stories. The other average heights of the blocks are as shown in the following table:

Table 65

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	15	3
2	5	2
3	5	3
4	5	3
5	4	3
6	5	4

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in good condition but there are vacant lots. Part of them are used as parking lots and others as small "Green Public Space."

The ratio footprint/lot area is near 0.7. The following tables present the building condition of the blocks in the district. (No. of block on map #A7).

Table 66

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1	3			
2		1	2	
3	1	1		1
4				
5				
6				
7				
8	1			
15		1		

Table 67

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1	3		1	
2	13	1		
3	5	1		
4				
5			1	
6				
7				

Table 68

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1			1	
2	13		2	
3	14	4		
4	8	2	2	
5		2		
6				
7				
8				

Table 69

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1				
2	1	1		
3	24	1	1	
4	13	1		
5	1			
6				
7				
8				

Table 70

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
1	1			
2	7	2		
3	11			
4	4	3		
5				
6				
7				

Table 71

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
1				
2	2			
3	1			
4	10	3	12	
5	10	7		
6				
7				

Table 72

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	7		2		9
2	36	7	2		45
3	45	8	1	1	55
4	35	9	14		58
5	11	3	1		15
6					0
7					0
8	1				1
15		1			1
Total	135	28	20	1	184

Table 73

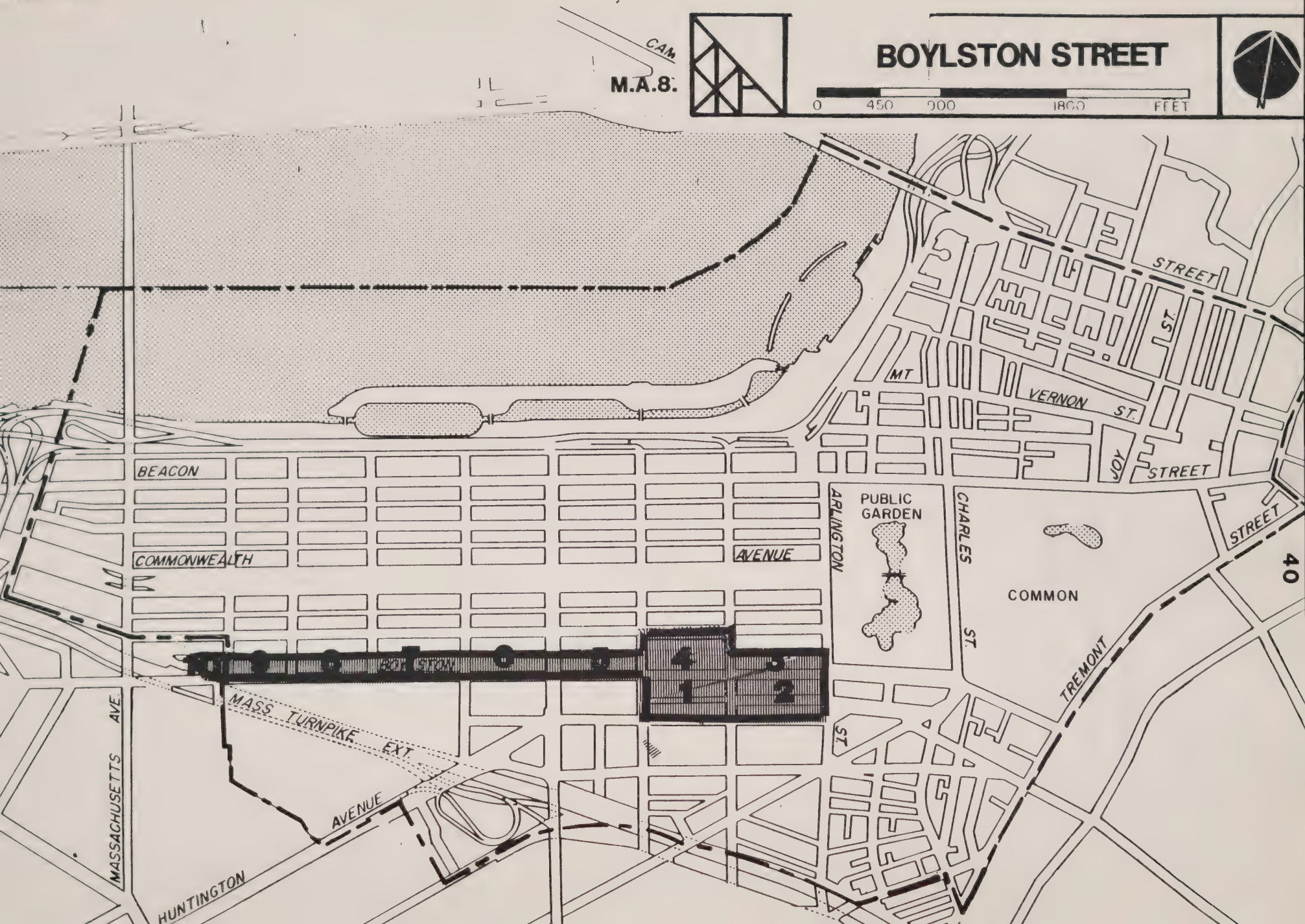
SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
184	135	28	20	1
100%	79%	15%	11%	1%

From the last table it can be seen that 79 percent of the buildings are in good condition and only 11 percent in poor conditon. As seen on map No. B7, the buildings in fair and poor condition are concentrated mostly in two points; the intersection of Winchester and Melrose Streets with Broadway and in block 6 on the corner of Cortes and Arlington Streets. All the buildings in the district are small on small lots.

Vacant Lots

The total vacant lot area in the Bay Village District is 77,000 square feet, and a footprint area of 60 percent leaves 46,300 square feet of floor area.


BOYLSTON STREET
0 450 900 1800 FEET
M.A.8.
CAM
STREET
ST.
MT
VERNON ST.
JOY
STREET
BEACON
COMMONWEALTH
AVENUE
PUBLIC
GARDEN
ARLINGTON
CHARLES
ST.
COMMON
STREET
40
TREMONT
ST
MASS TURNPIKE EXT.
AVENUE
MASSACHUSETTS AVE.
HUNTINGTON
1
2
3
4

Boylston District

The district is composed of ten blocks and bounded by Newbury, Boylston, St. James Streets, Massachusetts Avenue, and Arlington Street. The highest building is a new one, a 14-story building. The other average heights of the blocks are as shown in the following table.

Table 74

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	6	6
2	7	5
3	11	4
4	8	8
5	13	7
6	14	6
7	8	6
8	6	6
9	6	4
10	4	4

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in fair condition but there are a few in very bad condition. There are only two small vacant lots. The ratio footprint/lot area is not equal for all buildings, with extremes going from 0.5 to 1.0. The following tables present the building condition of the blocks in the district. (No. of block on map No. A8). (# of block on map # A5).

Table 75

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
2				
3	1			
4	1			
5	1			
6	1	2		

Table 76

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
2	1	2		
3				
4	1		3	
5	1	1		
6	1	1		1
14	1			

Table 77

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
4		1		1
5	2			
6			1	
14	1			

Table 78

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
4	1			
5				
6				
14				

Table 79

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
3		1		
4	1	1	2	
5	1	1		
6				
7	1			
8	2			
13	2			

Table 80

BLOCK 6

No. of Stories	Conditions A/B	C	D	E
3				
4	4		1	
5		2		
6		1		
7				
8				
13	1			

Table 81

BLOCK 7

No. of Stories	Conditions A/B	C	D	E
1	1			
2	1			
3	4			
4		1		
5	1	1		
6	1	1		
8	1			

Table 82

BLOCK 8

No. of Stories	Conditions A/B	C	D	E
1				
2	1	1		
3				
4			1	
5	1		1	
6	3			
8				

Table 83

BLOCK 9

No. of Stories	Conditions A/B	C	D	E
2	1			
3	3			
4	3			
5	1			

Table 84

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	1			1	
2	4	3			7
3	8	1			9
4	12	3	8	1	24
5	7	6		1	14
6	6	4	1	1	12
7	1				1
8	3				3
9					0
10					0
13	3				3
14	3				3
Total	48	17	3	3	77

Table 85

SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
77	48	17	9	3
100%	62%	23%	13%	1%

As seen on map No. B8, the buildings in poor condition are mostly concentrated in one block 2 between Arlington and Berkley Streets.

Vacant Lots

There are no vacant lots in the district. We can include two non-building lots: one on the corner of Fairfield and Boylston Streets used for parking and a gas station. The second at 859 Boylston street, where a building was demolished in January 1985. The total lot area is 9,202 square feet, with an 80 percent floor area for potential use, leaves 7,361 square feet of floor area.

KENMORE SQ.
BEACON
STREET
AVENUE
BOYLSTON
FENS
MASSACHUSETTS
AVENUE
AVE
BACK BAY
BROOKLINE
HUNTINGTON
ST.BOTOLPH STREET
0 400 800 1600 FEET
M.A. 9.

St. Botolph District

The district is composed of three blocks and bounded by Huntington Avenue, Gainsborough and Carleton Streets, and Massachusetts Avenue. The highest building is an 8-story building. The other average heights of the blocks are as shown in the following table.

Table 86

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	5	3
2	4	3
3	8	3

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in good condition. There are some vacant dwellings but no vacant lots. The ratio footprint/lot area is near 0.6. The following tables present the building condition of the blocks in the district. (No. of block on map No. A9).

(# of block on map # A5).

Table 87

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1				
2				
3	44	4	1	
4	27			
5	6			

Table 88

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1	1			
2				
3	49	4		
4	17	2		
5				

Table 89

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1				
2				
3	37	1		
4	24	1		
5		1		
6				
7	1			
8	1			

Table 90

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	1				1
2					
3	130	10	1		141
4	68	3			71
5	6	1			7
6					
7	1				1
8	1				1
Total	207	14	1		222

Table 90

SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
222	207	14	2	
100%	94%	6%	1%	

From the last table it can be seen that 94 percent of the buildings are in good condition and the other 6 percent in fair condition are not concentrated in one part of the street.

FORT POINT CHANNEL
CHANNEL
NORTHERN AVE. BRIDGE
NORTHERN AVE.
PIER
3
PIER
COMMON-WEALTH PIER
FISH PIER
CONGRESS ST. BRIDGE
SUMMER ST.
1
2
5
4
AVE.
FORT POINT
STREET
NAVAL ANNEX
ARMY BASE
RESERVED CHANNEL
1st.
BROADWAY
DORCHESTER AVENUE
ST.
STREET
ST.
RD.
CASTLE ISLAND
BROADWAY
ST.
DORCHESTER
ST.
4th
FARRAGUT
BLVD.
G
MARINE
RD
7
DAY

The Fort Point Channel

The field survey was limited to the blocks in the area bounded by Northern Avenue, B Street, Sobin Park, Richards Street and Fort Point Channel. The survey area is composed of five large blocks. (See Map No. A10.) The other average heights of the blocks are as shown in the following table:

Table 91

EXISTING HEIGHTS

Block No.	Maximum* No. of Stories	Average* No. of Stories
1	9	6
2	9	7
3	9	5
4	7	6
5	5	4

* The "Maximum and Average Number of Stories: are numerical values calculated to give a close approximation on the average height and variation. These mathematic averages of stories are not related to the floor area covered and do not, by themselves, provide the floor area ratio (F.A.R.)

The buildings are in fair condition but there are many vacant buildings. The vacant lots are generally used as parking lots.

The ratio footprint/lot area is near 1.0. The following tables present the building condition of the blocks in the district. (No. of block on map No. A10).

Table 92

BLOCK 1

No. of Stories	Conditions A/B	C	D	E
1	1		1	
2		2	3	
3			5	
4		1		
5	2	4	4	
6	7	4	2	
7				
8	1			
9		1	1	

Table 93

BLOCK 2

No. of Stories	Conditions A/B	C	D	E
1				
2				
3				
4		1		
5	1			
6	2	2		
7	1			
8		1		
9	4	4		

Table 94

BLOCK 3

No. of Stories	Conditions A/B	C	D	E
1	1		2	
2	1			
3				
4				
5	1	4	4	
6		6	2	
7	1			
8		4		
9		1		

Table 95

BLOCK 4

No. of Stories	Conditions A/B	C	D	E
1	1			
2		1		
3		2		
4				
5	1	1		
6	2	5		
7	1	2		
8				
9				

Table 96

BLOCK 5

No. of Stories	Conditions A/B	C	D	E
1			1	
2				
3	2			
4				
5			3	
6				
7			1	

Table 97

SUMMARY OF ALL BUILDING CONDITIONS

No. of Stories	Conditions A/B	C	D	E	Total
1	3		4		7
2	1	3	3		7
3	2	3	5		10
4		2			
5	5	9	11		25
6	11	17	4		32
7	2	2	8		12
8	1	5			6
9	4	6	1		11
Total	29	47	36		112

Table 98

SUMMARY OF BUILDING CONDITIONS
(In Percent)

Total No. of Buildings	Conditions A/B	C	D	E
112	29	47	36	
100%	26%	42%	32%	

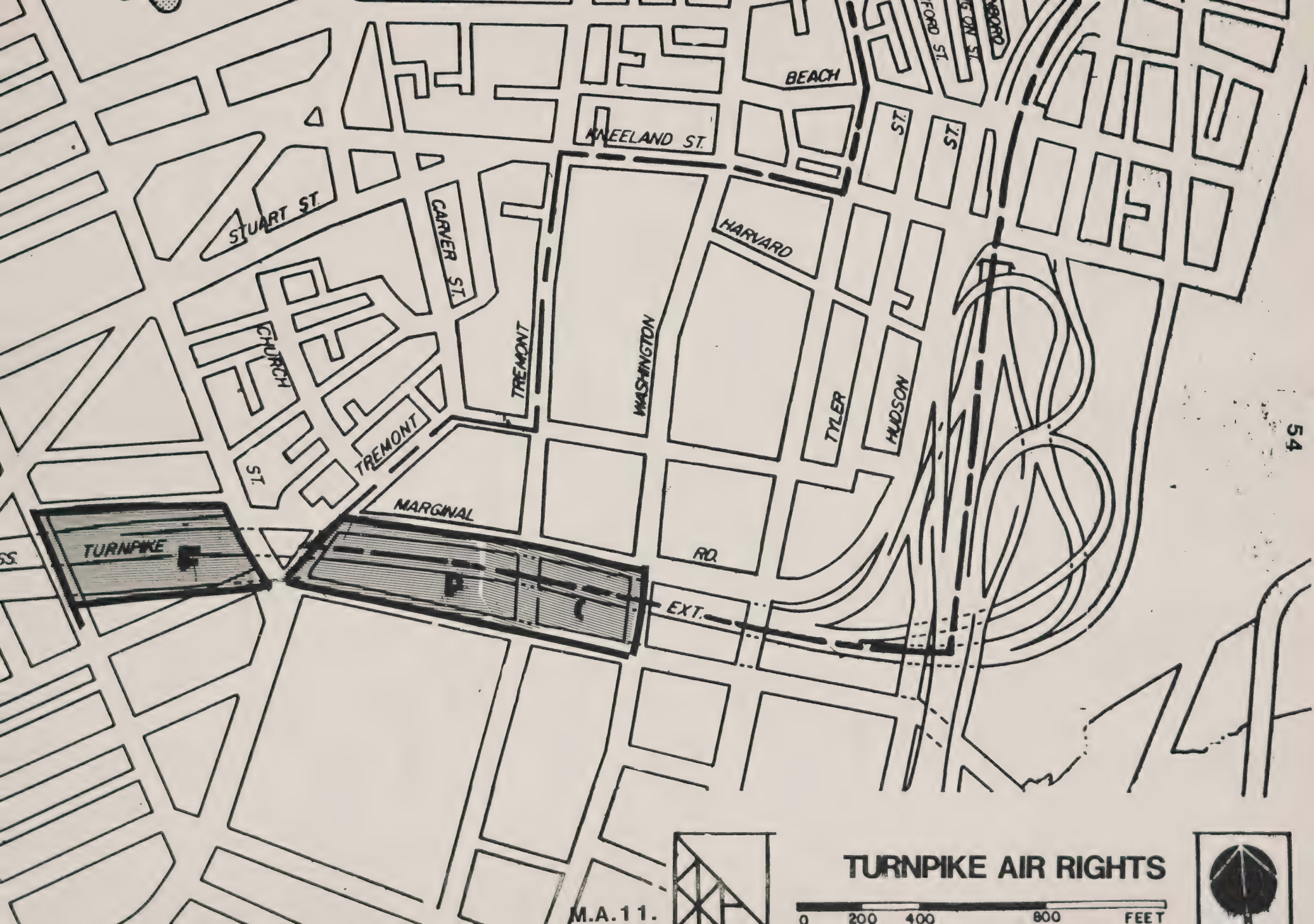
From the table it can be seen that only 26 percent of the buildings are in good or very good condition, and 32 percent are in bad condition.

As seen on map No. B10, the buildings in fair (C) and poor (D) condition are over the whole area and not concentrated in some blocks or parts of the surveyed area.

Vacant Lots

The vacant lot area in the surveyed area and all around it is very large. Concentrating on the vacant lots between existing buildings, the

total vacant area is: Summer/Congress Streets--96,415 square feet, A Street area = 168,219 square feet.


BEACH
KNEELAND ST.
STUART ST.
CARVER ST.
HARVARD
CHURCH ST.
TREMONT
WASHINGTON
TYLER
HUDSON
TREMONT
MARGINAL
RD.
TURNPIKE
EXT.
TURNPIKE AIR RIGHTS
0 200 400 800 FEET
M.A.11.

C. DOWNTOWN DISTRICTS AND DEVELOPMENT ALTERNATIVES

Alternative Horizons on the Residential Development Potential

The eleven districts mentioned in Chapter B are postulated for rehabilitation and, where possible, for conversion to apartments. On the average, an area of 1,000 square feet per apartment is assumed in the present analysis. This chapter will explore how many square feet of building space could be converted to apartments, and which of the buildings appear to be more suitable for conversion. Every Downtown district will be analyzed individually.

The first alternative will be based on setting up new buildings on vacant lots, and using existing buildings for rehabilitation and conversion into residential apartments. For this analysis, the average floor area of an apartment will also be considered to be 1,000 square feet.

The second alternative will be based on the analysis of every block with its range of possibilities.

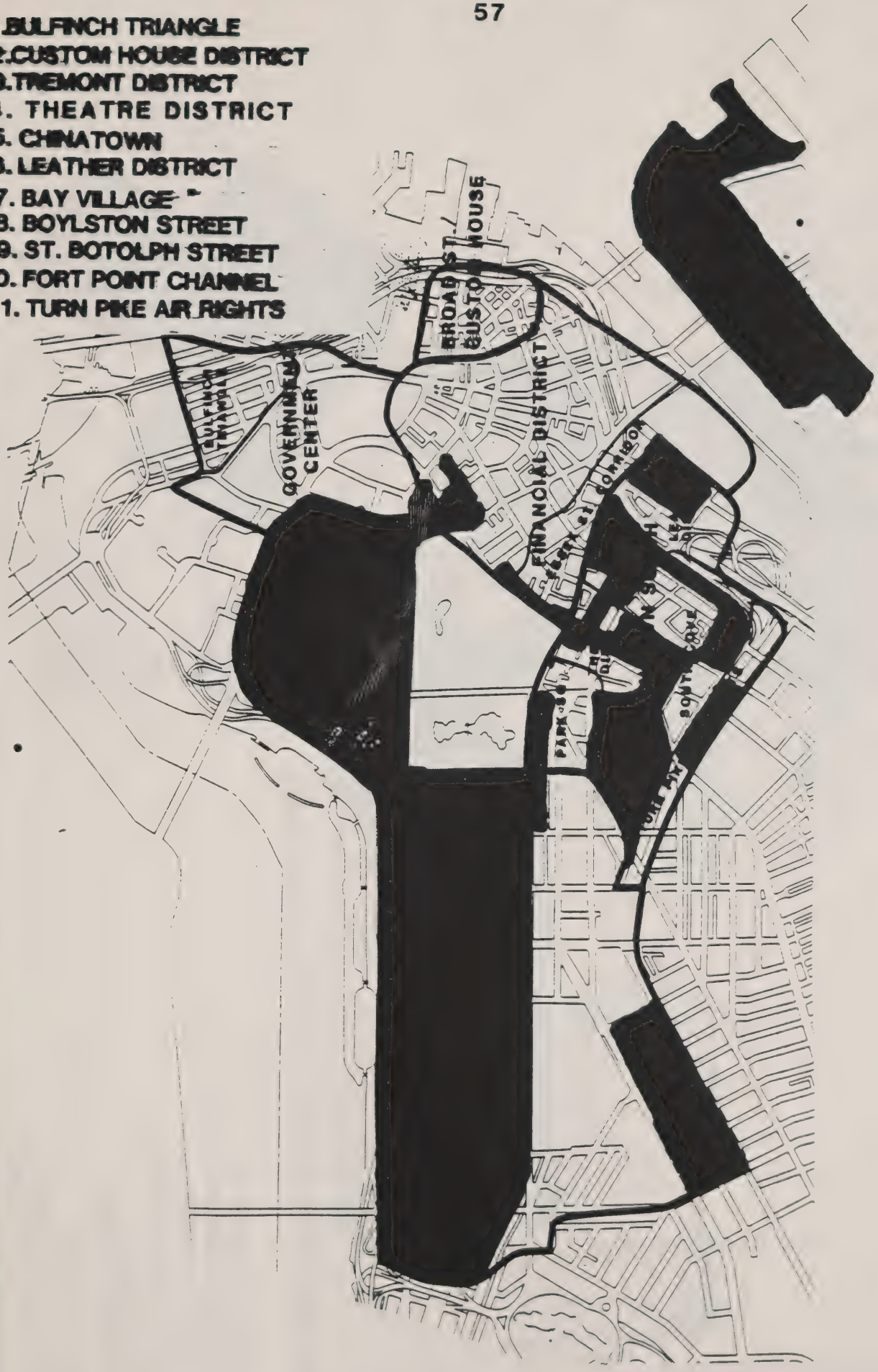
The idea behind the various alternatives is to find the largest number of apartments that potentially could be set up in these districts. Then, having this top number, eliminating the less probable buildings for such a conversion, we will get the minimum number of apartments that potentially could be set up in these districts. The "Two Alternatives" are not based on future design projections of developers or real estate brokers and such an alternative could be examined in the next steps of this work.

Residential Development Potential - Downtown

The revitalization area for residential development is composed of districts in the Downtown, linked within them, or with other residential neighborhoods. They will create a new strip of residential neighborhoods beginning with Boylston Street, the Theatre District, the Tremont District, Chinatown, and the Leather District. The Bulfinch Triangle District will be a continuing strip of the West End Residential Buildings and the North End. The Custom House District will be a continuing strip with the Waterfront residential part and the Fort Point Channel District a continuing residential strip of South Boston (see Map No. M.A.1.)

The residential development potential analysis is based on these opportunities. It means that many assets and constraints will have to be made of the discussed area and its buildings. In detail: An analysis of accessibility by both public and private transportation; an evaluation of the condition and capacity of existing infrastructure; a recognition of other unique or constraining site characteristics; and a review of all zoning regulations in these districts to enhance and emphasize the residential trend.

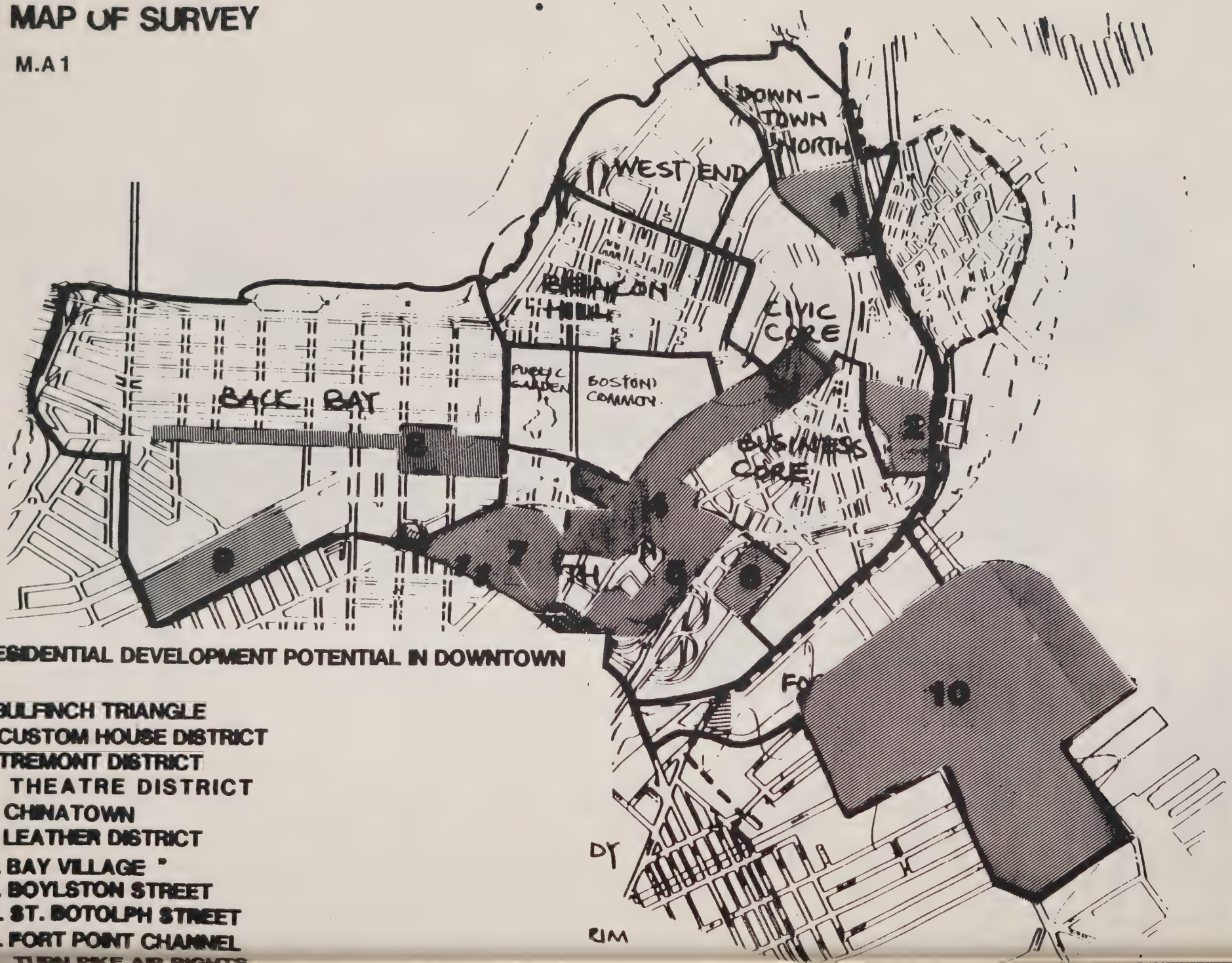
1.BULFINCH TRIANGLE
2.CUSTOM HOUSE DISTRICT
3.TREMONT DISTRICT
4. THEATRE DISTRICT
5. CHINATOWN
6. LEATHER DISTRICT
7. BAY VILLAGE
8. BOYLSTON STREET
9. ST. BOTOLPH STREET
10. FORT POINT CHANNEL
11. TURN PIKE AIR RIGHTS



DOWNTOWN-

MAP OF SURVEY

M.A 1



RESIDENTIAL DEVELOPMENT POTENTIAL IN DOWNTOWN

1.BULFINCH TRIANGLE
2.CUSTOM HOUSE DISTRICT
3.TREMONT DISTRICT
4. THEATRE DISTRICT
5. CHINATOWN
6. LEATHER DISTRICT
7. BAY VILLAGE "
8. BOYLSTON STREET
9. ST. BOTOLPH STREET
10. FORT POINT CHANNEL
11. TURN PIKE AIR RIGHTS

M.C.1.a.

BULFINCH TRIANGLE

The Bulfinch Triangle District

The 1st Alternative

a. Vacant Lots

The total vacant lot area in the district is 71,670 square feet divided in ten lots. It includes the gas station area on the corner of Portland and Merrimac Streets. With a footprint area of 0.8, the used land area will be 57,330 square feet. As seen in the following table, if all the infill buildings are used for housing (excluding the first floor), the number of dwelling units will be more than 230 units, on 10 lots, with an average of 23 apartments per building.

Table 1

NEW BUILDINGS ON VACANT LOTS

* Number of Stories for Apartment Use		Gross Floor Area on Vacant Lots	Number of Dwelling Units	Floor Area Ratio
5	(4)	229,400	230	4.0
6	(5)	286,700	287	4.8
7	(6)	344,000	344	5.6
8	(7)	401,400	401	6.4
9	(8)	458,700	459	7.2
10	(9)	516,033	516	8.0
12	(11)	630,707	631	9.6
14	(13)	745,381	745	11.2

* The real height available for residential use will be one story less for ground floor stores.

b. Rehabilitation of Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of gross building area will be as follows:

Table 2

BUILDING GROSS AREA

Block No.	Building Condition C, D, E	Lot Area In Square Feet	Gross Floor Area in Square Feet
1	C	16,805	79,444
1	D	26,319	35,982
1	E	2,030	4,060
2	C	2,992	6,418
3	C	10,007	24,938
3	D	12,760	27,634
3	E	5,132	14,338
4	C	4,451	11,255
4	D	11,848	59,240
5	D	11,545	8,443
7	D	20,373	36,240
7	E	3,960	19,800
Total		128,222	338,792

From Table 2, having 339,000 square feet of building area and using for residential use only 90 percent of this area, leaves 312,000 square feet of residential use or 312 dwelling units. The total number of dwelling units with the 1st alternative will be:

Table 3

TOTAL NUMBER OF DWELLINGS

No. of Stories	Apartments On Vacant Lots (Infill)	Number of Dwellings in Rehabilitated Buildings	Total Number of Apartments--Residential Development Potential Alternatives
5	230	312	444
6	287	312	501
8	401	312	615
9	459	312	673
12	631	312	845
14	745	312	959

The residential development potential with the 1st alternative means having, from a minimum of 444 units to a maximum of 959 units.

The 2nd Alternative

The analysis of every block with its range of possibilities will take into consideration the maximum high in every block and the possibility of adding other stories on low existing buildings.

Table 4

Block 1

No. of Stories		Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing * Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6	(5)	50,665	66,910	43,645	161,220	161
7	(6)	60,798	66,910	50,750	178,458	178
8	(7)	70,931	66,910	59,885	197,726	198
9	(8)	81,064	66,910	69,020	216,994	217

* Buildings: 104 Canal St., 233 Friend St. in A/B condition, 237 Friend St. in E condition.

Table 5

Block 2

No. of Stories		Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing * Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6	(5)	17,780	6,418	5,550	29,748	30
7	(6)	21,408	9,410	7,400	38,218	38

* Building: 185 Friend St.

Table 6

Block 3

No. of Stories	Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6 (5)	82,010	68,948	21,224	172,072	172
7 (6)	98,412	68,948	26,952	194,312	194
8 (7)	114,814	68,948	32,790	216,552	216
9 (8)	131,216	68,948	38,628	238,792	238

Table 7

Block 4

No. of Stories	Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6 (5)	95,615	81,495	-	171,110	171
8 (7)	133,861	81,495	-	215,356	215

Table 8

Block 5

No. of Stories	Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6 (5)	95,000	0	78,155	173,155	173
7 (6)	114,000	0	93,786	207,786	208
8 (7)	133,000	0	109,417	242,417	242

Table 9

Block 7

No. of Stories	Gross Floor Area on Vacant Lots	Gross Floor Area in Existing Buildings in C/D/E Condition	Gross Floor Area Adding Additional Floors on Existing Buildings	Total Gross Building Area	Total Number Of Apartments-Residential Development Potential Alternatives
6 (5)	27,475	55,940	19,585	103,000	103
7 (6)	32,970	55,940	24,272	113,182	113

The total number of apartments with the 2nd alternative is a function of the number of stories taken in consideration for the "infill" and additional floors. For the residential use, the ground floor, used as the main entrance, office, retail, etc., was not taken in count.

As it can be seen, with the 1st alternative, the number of residential development potential units is (all 9 stories) 673 units. With the 2nd alternative, as shown in Table 10, it will be 896 units. (See consequences in Section 3.)

Table 10

TOTAL NUMBER OF RESIDENTIAL UNITS

Number of Stories (Total)	Block No. 1	Block No. 2	Block No. 3	Block No. 4	Block No. 5	Block No. 7	Total Number Of Residential Units
6	161	30	172	171	173	103	810
7	178	38	194	215	203	113	941
8	198	38	216	215	242	113	1,022
9	217	38	238	215	242	113	1,176

Table 11

THE HIGHEST PROBABILITY FOR THE DISTRICT

Number of Stories (Total)	Block No. 1	Block No. 2	Block No. 3	Block No. 4	Block No. 5	Block No. 7	Total Number Of Residential Units
6	0	30	172	171	0	103	476
7	0	0	0	0	203	0	203
8							-
9	217						217
Total	217	30	172	171	203	103	896

Bulfinch Triangle

The Residential Development Potential = 900 Dwelling Units.

VACANT LAND

Vacant Lots

M.C. 1.b.

BULFINCH TRIANGLE

BUILDING CONDITION (from BRA sur

A/B condition

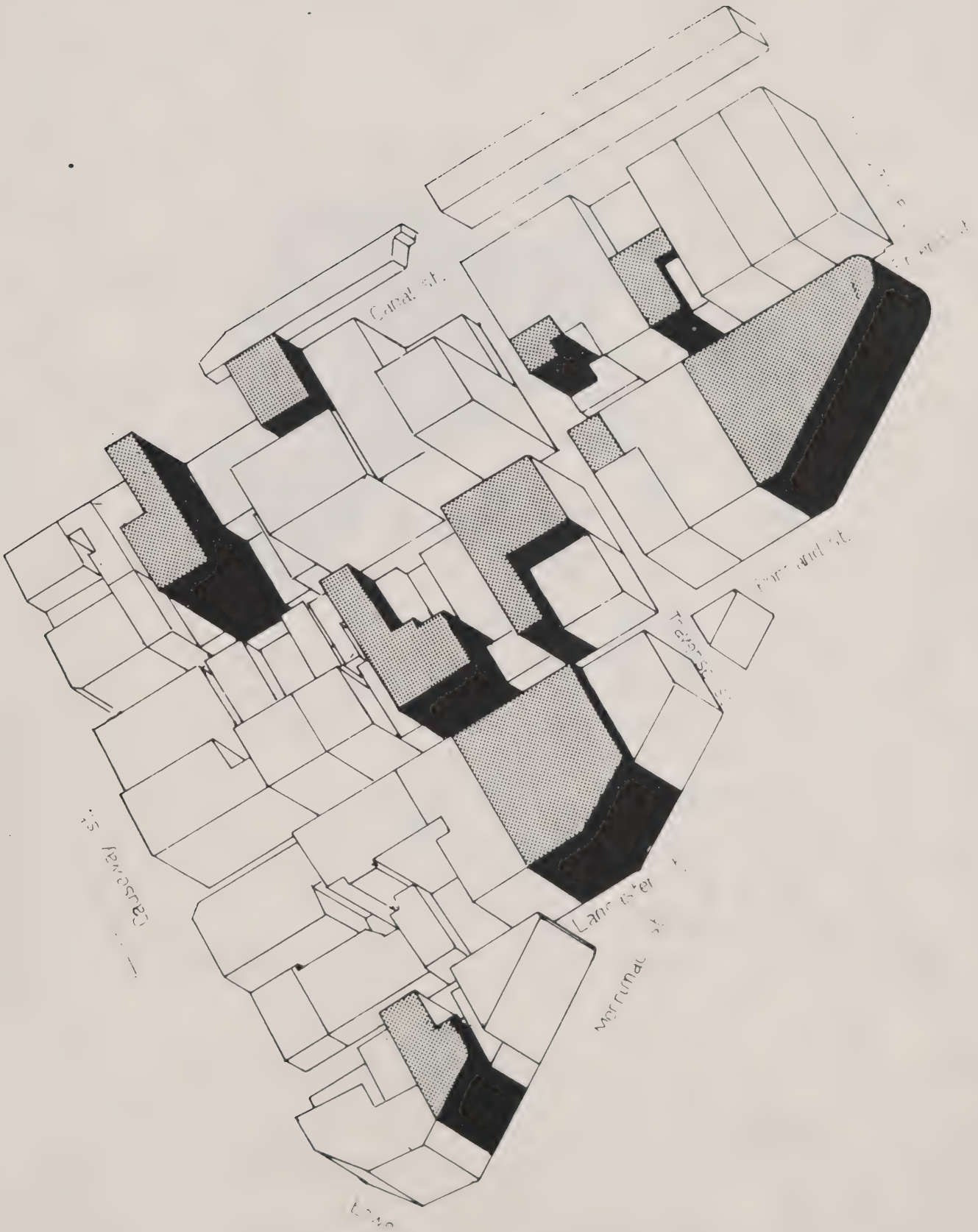
C condition

D condition

E condition

BULFINCH TRIANGLE

New building
Potential



M.C.1.d.

BULFINCH TRIANGLE

CHATHAM
ST.
MERCHANTS
ROW
COMMERCIAL
ATLANTIC
STREET
EAST INDIA
ROW
AVE.
COURT
ST.
STATE
FRANKL
AVE
COURT SQ
COURT SQ
PI ALLEY
DEVONSHIRE
EXCHANGE PL
HAWES ST.
WATER
ST
SPRING LN.
STREET
MILK
ST.
OLIVER
LENTON
WHARF
PROVINCE
PROVINCE CT
ORDWAY PL
MILK
ST
CONGRESS
PEARL
FEDERAL
FRANKLIN
HAWLEY
PL
ST.
STREET
FRANKLIN
HAWLEY
SNOW PL
BUSSEY PL
ARCH
OTIS ST.
DEVONSHIRE
ST
SULLIVAN PL
MATTHEWS ST
FEDERAL CT
HIGH ST PL
MILTON PL
MILTON PL
ST.
HIGH
ST.
HIGH ST CT
LANE
HIGH ST
ST.
PRINCE
ST.
KINGSTON
ST.
KINGSTON
ST.
ESSEX
ST.
ST
EDINBORO ST
PINE ON
COLUMBIA ST
ST.
ST.
ST.

Custom House District

The 1st Alternative

a. Vacant Lots

The total vacant land in the Custom House District is 31,300 square feet. Taking in consideration that 7,100 square feet are very close to the Expressway, leaves for residential development a potential 24,000 square feet. Using a 0.8 footprint area, the real useful land area will be 19,000 square feet. As seen in Table 12, if all the "infill" buildings will be designated for residential use, the number of new dwelling units will be between 95 units and 361 units, function of the height of the buildings.

Table 12

NEW BUILDINGS ON VACANT LOTS

* Number of Stories for Apartment Use	Gross Floor Area on Vacant Lots	Number of Dwelling Units	Floor Area Ratio
6 (5)	95,000	95	4.9
8 (7)	133,000	133	6.5
10 (9)	171,000	171	8.1
12 (11)	203,000	203	9.5
14 (13)	247,000	247	11.2
15 (14)	266,000	266	12.1
20 (19)	361,000	361	16.0

* The real height available for residential use will be one story less for ground floor stores.

b. Rehabilitation of Existing Buildings

Concentrating on buildings in C/D/E condition, excluding buildings bordering the Expressway and including historic buildings, the

residential rehabilitation potential will be: 105 dwelling units. With this 1st alternative, the total number of residential units will be as following in Table 13.

Table 13

RESIDENTIAL REHABILITATION POTENTIAL

Block No.	Building Condition	Gross Floor Area for Residential Use	Gross Floor Areas for Mixed Use	No. of Dwelling Units
1	C	22,100	27,600	22
7	C	4,000	5,800	4
7	D	6,900	6,900	7
7	E	17,000	21,000	17
8	C	15,000	16,000	15
11	C	3,300	3,300	3
12	D	11,600	14,500	11
12	E	4,500	6,100	4
14	C	13,000	16,000	13
14	D	9,300	11,500	9
Total				105

Table 14

TOTAL NUMBER OF DWELLINGS

No. of Stories	Dwelling Units on Vacant Lot "Infill"	Number of Dwelling Units In Rehabilitated Buildings	Total Residential Development Potential in Dwelling Units
6	95	105	200
8	133	105	238
10	171	105	276
12	203	105	308
14	247	105	352
15	266	105	371
20	361	105	466

As seen in Table 14, the maximum number of dwelling units will be 470 units.

The 2nd Alternative

The 2nd alternative is based on the analysis of every block with its range of possibilities.

Block 7

The average height of the block is 6 stories. The vacant lot is 9,200 square feet. With a maximum height of 8 stories, a footprint area of 0.8, the gross floor area (GFA) will be 59,000 square feet. Using only one floor for commercial use, leaves 50,000 square feet for residential use or 50 dwelling units. The residential rehabilitation potential of buildings in C/D/E. condition is 36,000 square feet or 36 dwelling units. The total residential development potential in the block will be 86,000 square feet, or 86 dwelling units.

Block 8

Demolishing the parking building of 2 stories in the Custom House Street, the total vacant land area will be 20,000 square feet. Although a part of the lots are bordering the Expressway and taking into consideration their use for office and retail, the residential development potential will be as following in Table 15. The residential development potential for this block, with a maximum of 11 stories height, will be 160 dwelling units.

Table 15

BLOCK 8 - NEW BUILDINGS

Number of Stories	Building Area For Residential Use in Square Feet	Number of Dwelling Units	Floor Area Ratio
6 (5)	80,000	80	4.8
8 (7)	112,000	112	5.5
10 (9)	144,000	144	8.2
11 (10)	160,000	160	8.0
14 (13)	208,000	208	11.4

Block 11

The only vacant lot area is 2,700 square feet. Being within 50 feet of a landmark building, the maximum height will be 60 feet or 5-stories. Using a footprint area of 0.8, the gross building area will be 10,800 or 10 dwelling units.

Block 12

There are two alternatives: (1) Setting up a new building on the lot area of buildings in D/E condition. The lot area is 6,750 square feet. With a 0.8 footprint area and 60 feet height, the building square foot area will be 40,000 square feet, or 40 dwelling units. (2) Rehabilitating the existing buildings in D/E condition and converting them to residential use, the total building area will be 33,942 square feet, and using the first floor for commercial use, leaves 27,000 square feet for residential use, or 27 dwelling units.

Block 14

The total vacant lot area is 6,300 square feet. Using for residential development only 2,440 square feet, and with a maximum height of 6 stories, the total residential building area will be 15,000 square feet, or 15 dwelling units. (The other lots are on backyards or too close to the Expressway.) The only building for rehabilitation and conversion to residential use has 11,900 square feet of building area. Using the ground floor for commercial use, the residential rehabilitation potential will be 9,500 square feet, or 9 dwelling units (with the 2nd alternative). With the 1st alternative, the number of dwelling units for a maximum 8-story height will be 238 units. With the 2nd alternative it will be 311 units.

Table 16

MAXIMUM NUMBER OF DWELLING UNITS

Block No.	Dwelling Units
7	86
8	160
11	10
12	40
14	15

Custom House District

The Residential Development Potential = 310 Dwelling Units.

M.C.2.b.

CUSTOM HOUSE DISTRICT

SIGNIFICANCE

CATEGORY

fromBRA survey

A B condition

C condition

D condition

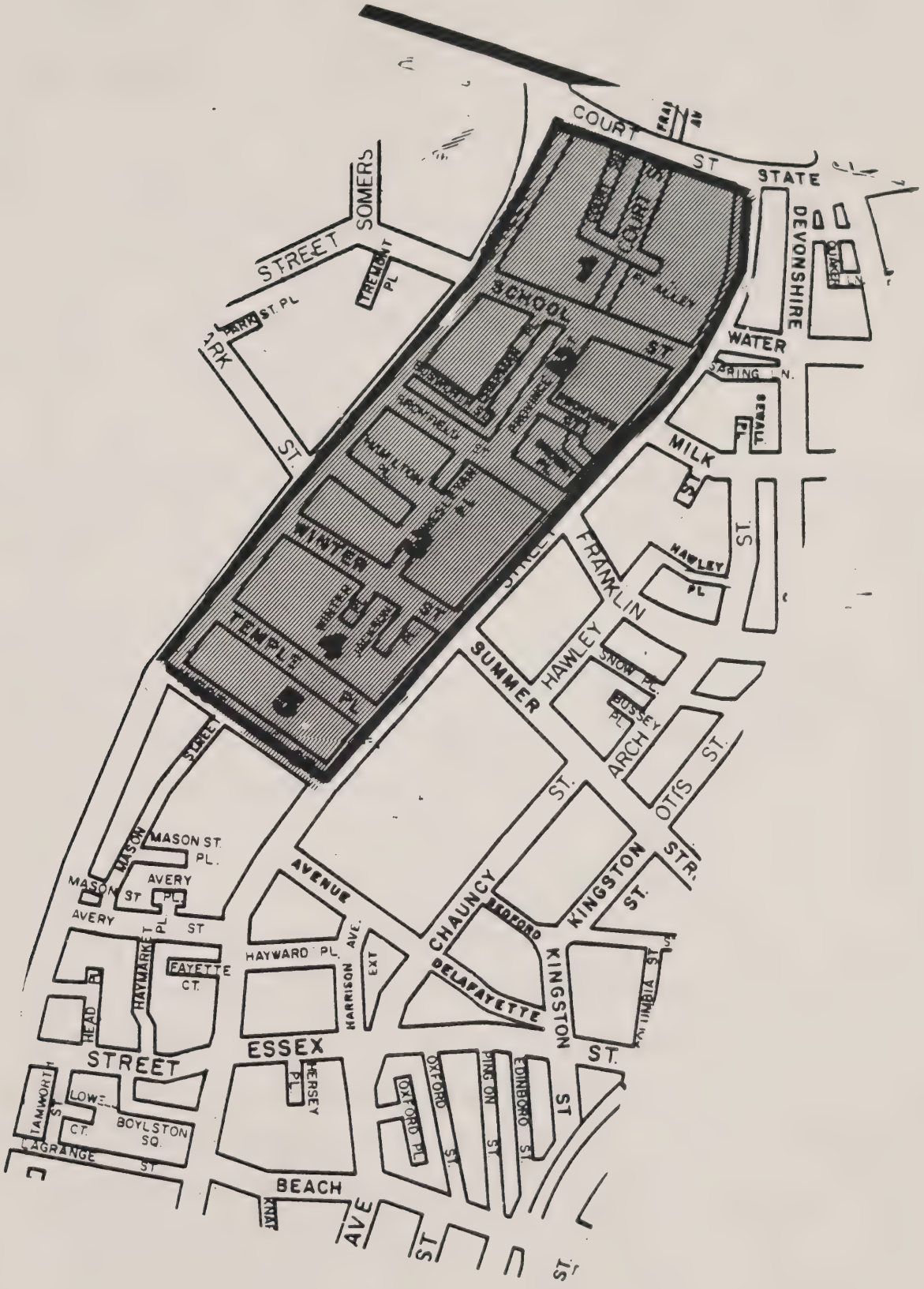
E condition

CUSTOM HOUSE DISTRICT

M.C.2.d.

"INFILL"
New Building Potential

CUSTOM HOUSE DISTR



TREMONT DISTRICT

The Tremont District

The 1st Alternative

The total vacant land area in the district is only 10,000 square feet. The residential development potential will be only 50,000 building square feet or 50 dwelling units since the lots do not face a main street and not suitable for residential use.

The buildings in C/D/D condition are all on inner streets or on Washington Street with narrow facades on the street and are not suitable for residential use.

The 2nd Alternative

The 2nd alternative is based on the analysis of every block with its range of possibilities. The emphasis will be to allocate residential space on Tremeont Street.

Block 2

Unificating the lots on Bosworth Street and Chapman Place (see Map No. M.C.3a), the total lot area will be 26,000 square feet. The facade on Tremont Street will be used for residential development. With a 12-stories height, the gross building area on Tremont Street will be 164,000 square feet. Using the first three floors for commercial use, leaves 130,000 square feet for residential use or 130 dwelling units (96 and 101 Tremont Street).

Block 5

Unificating the vacant lots and the buildings in C/D condition between Temple and West Streets will leave a lot area of 22,500 square feet. Using a 0.8 footprint and a maximum 6-stories height, the total building area will be 108,000 square feet. Using the first floor for commercial use, the residential development potential will be 90,000 square feet or 90 dwelling units.

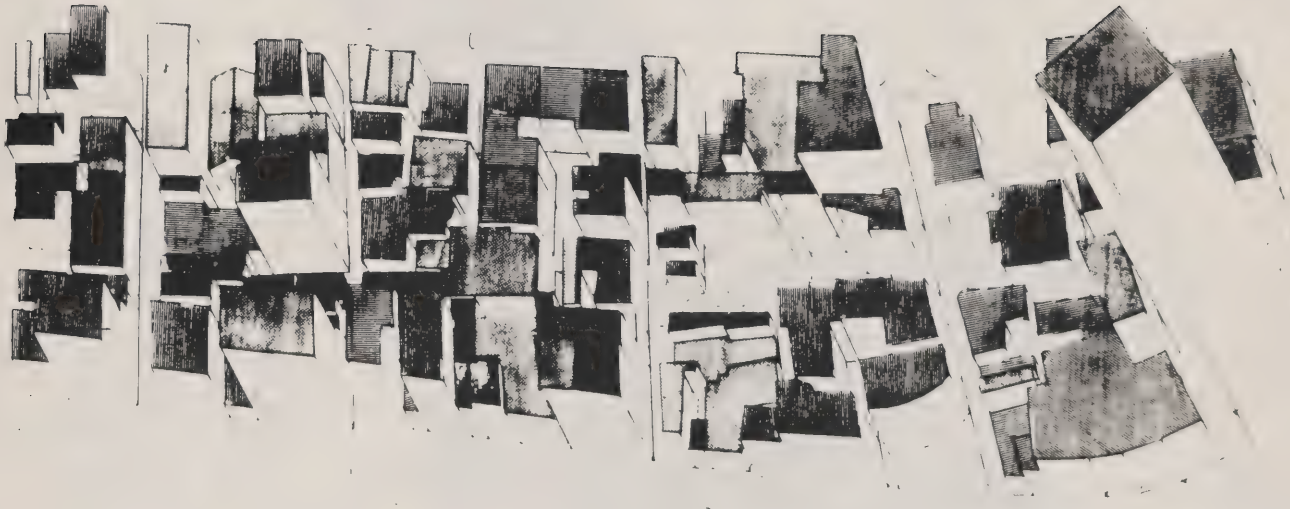
The option to convert the buildings in C/D condition into residential use will leave 72,000 square feet on the upper floors or 72 dwelling units (see Map No. M.C.3.b.).

The maximum residential development potential in this district is 220 dwelling units.

The Tremont District

The Residential Development Potential = 220 dwelling units.

CONDITION
from BRA survey
A, B condition
C condition
D condition
E condition



M.C.3.b.

TREMONT DISTRICT

M.C.4.a.

THEATRE DISTRICT

The Theatre District

The 1st Alternative

a. Vacant Lots

The Theatre District can be divided in three large blocks: between West Street and Boylston/Essex Streets; between Tremont/Essex Streets and Stuart/Kneeland Streets; between Stuart Street and Warrenton Street.

The total vacant area in the Theatre District is 153,547 square feet, including the Keith Block and Parcels 31, 32, and 30. With a footprint area of 0.8, the useful footprint area will be 122,838 square feet. As seen in the Table 1, if all the "infill buildings" will be used for residential use, excluding the first two floors, the number of dwelling units will be 1,474 units. It does not mean that all these new buildings have to be for only residential use.

Table 17

NEW BUILDINGS ON VACANT LOTS

Number of Stories for Residential Use		Gross Floor Area on Vacant Lots	Number of Dwelling Units (Residential Potential Development)
10	*(8)	982,704	983
11	(9)	1,105,542	1,105
12	(10)	1,228,380	1,228
13	(11)	1,351,218	1,351
14	(12)	1,474,056	1,474

* The real height available for residential use.

b. Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of gross building area will be as shown in the following table:

Table 18

EXISTING BUILDINGS

Building Condition	Lot Area in Square Feet	Gross Floor Area for Residential Use	Total Gross Floor Area for Mixed Use	F.A.R.
C	84,118	422,898	591,134	7.0
D	93,602	337,445	524,649	5.6
E	29,300	66,901	125,501	4.3
Total	207,020	827,244	1,241,284	6.0 (Average)

From Table 18, with 827,244 square feet of building area means to have potentially 827 dwelling units. The total number of residential development potential, in dwelling units, will be between 1,810 and 2,300 units. This 1st alternative didn't take into consideration demolishing buildings and development of big projects. It considered that all the rehabilitation will be for residential use.

Table 19

TOTAL NUMBER OF DWELLINGS

No. of Stories	Dwelling Units on Vacant Lot "Infill"	Number of Dwelling Units In Rehabilitated Buildings	Total Residential Development Potential in Dwelling Units
10 (8)	983	827	1,810
11 (9)	1,105	827	1,932
12 (10)	1,228	827	2,050
13 (11)	1,351	827	2,178
14 (12)	1,474	827	2,301

The 2nd Alternative

The 2nd alternative will be based on the analysis of every block with its range of possibilities. It takes into consideration the list of "historical buildings" and their near surrounding buildings.

Block 1

Parcel 32 is now occupied by buildings of 2- to 6-stories, mostly in fair and poor condition. Their existing potential for housing, if rehabilitated, is 34,000 square feet, including the vacant lot on 164 Tremont St. It means 34 dwelling units. Building a new project on the same parcel, with 12-stories maximum height, the potential will be 17,800 square feet of land area (a footprint of 0.7 and an average of 10 floors) and 125,000 square feet of gross building area (FAR. = 7.0). The residential potential will be 100,000 square feet. The other vacant lots are not feasible for residential use.

- Maximum Gross Floor Area for potential residential use = 100,000 square feet.

Block 2

This block includes Parcel 30 and other historical buildings facing Tremont and Boylston Streets. The residential potential of these buildings (39 Boylston Street, 175, 177, 178 Tremont Street) is 130,000 square feet of Gross Floor Area (GFA). Including these buildings (lot area) and the vacant lot area of Parcel 30, the total lot area will be 42,600 square feet (with a 0.7 footprint area; a maximum high of 14

stories and an average of 10 stories) the Gross Floor Area will be 298,400 square feet. The residential development potential building area will be 238,500 square feet. Not all the dwelling units have to be allocated on the Common. Although the Mason Building is now in commercial use, the future may take into consideration a shift to residential/commercial mixed use, with its 135,000 square feet in upper floors (135 dwelling units).

- Maximum GFA for potential residential use = 238,000 square feet.

Block 3

This block, which includes the Transportation Building, has 130,000 square feet of gross building area in C and D condition on the Common (between Boylston Place and Carver Street). The vacant lot of 3,500 square feet (with a 6-story building) has a potential Gross Floor Area of 21,000 square feet. Using the upper floors for residential use, the total square feet of residential potential is 90,000 square feet or 90 dwelling units. Using the same lot area of 30,400 square feet for a new development (with an average height of 10 stories and a footprint of 0.7) the total building gross area will be 213,000 square feet (FAR=7.0) and the residential potential building area will be 170,000 square feet or 170 units. In this case the residential building area is extended, on average, only 8 floors.

- Maximum GFA for residential potential use = 170,000 square feet.

Block 4

The "Hinge Block" or Parcel 31 has 28,800 square feet of vacant lot. Most of the buildings are in poor and very poor condition (D/E) with some "historical buildings" among them. Their residential rehabilitation potential is in doubt, excluding some buildings. For residential use, we could consider the Touraine Building (172,000 square feet of building area), the YMCU building (39,000 square feet of building area) and the Jacob Wirth's Block with its 88,000 square feet of building area. Using the first floors for retail use, their residential rehabilitation potential building area will be 200,000 square feet. Adding to the vacant lot area the lot area of buildings in poor condition, the total lot area of the parcel will be 90,000 square feet. With a footprint of 0.7 and average of 12 stories, the new development potential Gross Floor Area will be 756,000 square feet (FAR=9.8). For residential use, there will be only 180,000 square feet of building area.

- Maximum GFA for residential potential = 380,000 square feet.

Block 5

The "Liberty Block," between Hersey Place and Washington Street and between Knapp Street and Kneeland Street are not feasible for large residential use.

Block 6

The "Shubert Block," that really is not a part of the Theatre District is a link block between the Theatre District and the Bay

Village District and a mixed use of commercial/residential will be successful. The real potential lot area is 16,000 square feet. It means, with a floorprint area of 0.8, an average height of 6 stories, to have a GFA of 77,000 square feet, or 80 dwelling units. It includes the "Theatre District Apartments" of 40 dwelling units. A possible conversion of the Bradford Holel (C condition) into a residential building, with its building area of 225,000 square feet, will add another 230 dwelling units. Adding the 280 dwelling units from the conversion of the Don Bosco Schools, the maximum total number of residential units in the block will be 360 units.

The residential development potential of the Theatre District will be:

Block 1-100,000 square feet, 100 units

Block 2-240,000 square feet, 240 units

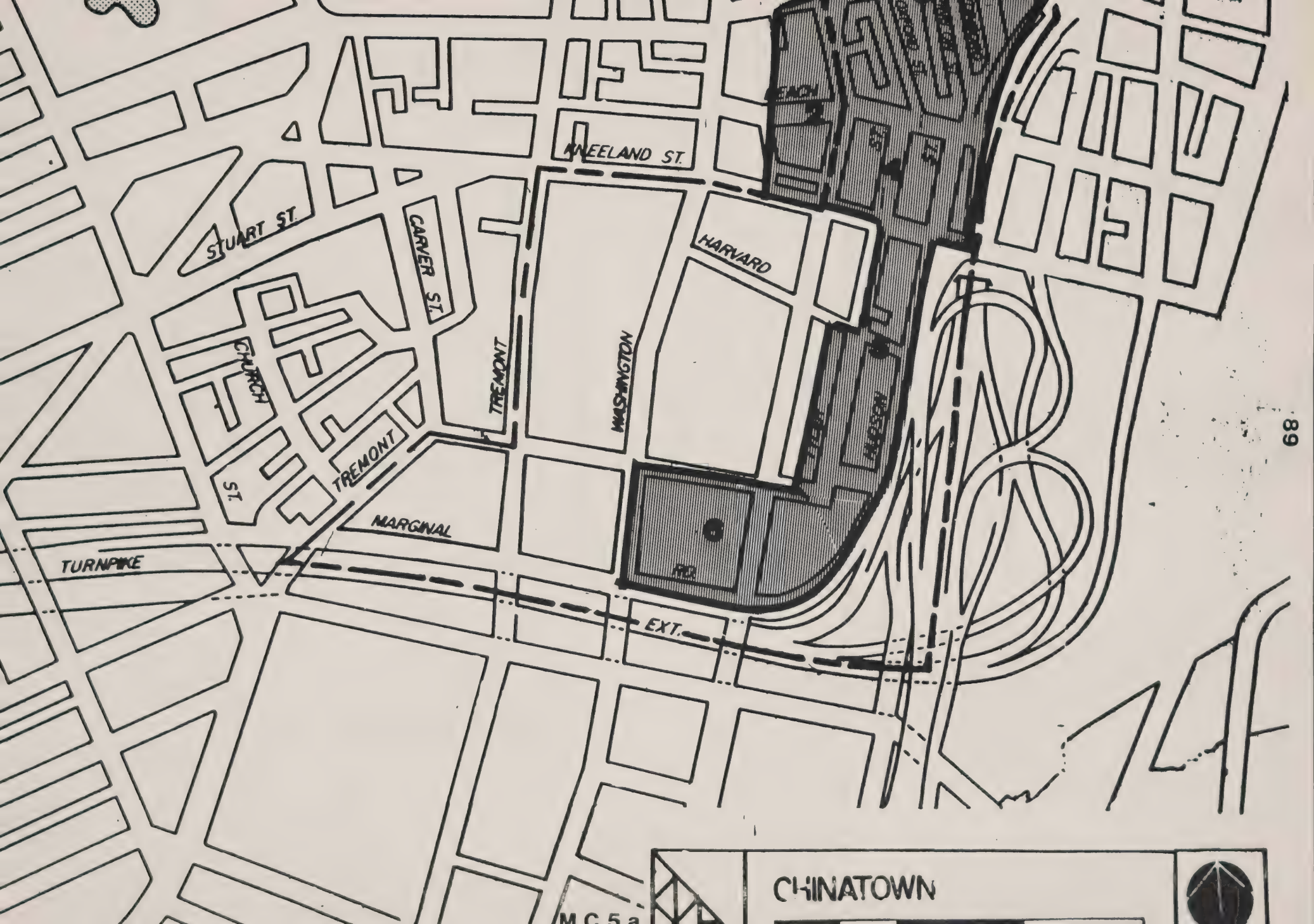
Block 3-170,000 square feet, 270 units

Block 4-380,000 square feet, 380 units

Block 6 360 units

The Theatre District

The Residential Development Potential 1,250 Dwelling Units.


KNEELAND ST.
STUART ST.
CARVER ST.
HARVARD
TREMONT
WASHINGTON
CHURCH
ST.
TREMONT
MARGINAL
TURNPIKE
EXT.
CHINATOWN
M.C.5a

Chinatown

The 1st Alternative

a. Vacant Lots

The Chinatown District can be divided into two semidistricts: between Essex and Kneeland Streets and between Kneeland Street and Broadway.

The total vacant land area in the Essex/Kneeland semidistrict is 33,000 square feet divided into 5 sites. The total vacant land area in the Kneeland/Broadway semidistrict is 56,000 square feet divided into 6 sites. As seen in Table 20, if all the "infill" will be used for residential use, and using a 0.6 footprint area, the number of dwelling units will be more than 107 units.

Table 20

NEW BUILDING ON VACANT LOTS

Number of Stories	Square Feet of Building Area on Vacant Lots	Number of Dwelling Units	Floor Area Ratio
2	107,000	107	1.2
3	160,000	160	1.8
4	214,000	214	2.4
5	267,000	267	3.0
6	320,400	320	3.6

b. Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of gross building area will be as follows in Table 21.

Table 21

GROSS BUILDING AREA

Block No.	Building Condition	Lot Area in Square Feet	Gross Floor Area in Square Feet	Gross Building Area in Square Feet for Residential Use (60%)
1	B	5,147	61,746	37,048
1	C	10,829	91,619	54,971
1	D	8,492	64,222	38,533
2	C	11,919	79,123	47,474
3	D	15,256	113,804	91,043
3	C	37,119	238,822	143,293
3	D	20,542	115,928	69,556
4	C	4,920	19,680	11,808
4	D	10,656	63,936	38,362
6	D	5,506	33,036	19,822
6	E	3,207	16,035	9,621
6	C	3,107	21,743	13,050
Total		136,700	919,700	551,820

From Table 21, having 920,000 square feet of building area, and using only 60 percent for residential use, leaves 551,820 square feet. It means having a residential potential of 552 dwelling units. The total residential development potential with the 1st alternative means a minimum 660 units to a maximum of 870 units.

Table 25

TOTAL NUMBER OF DWELLINGS

No. of Stories	Dwelling Units on Vacant Lot "Infill"	Number of Dwelling Units In Rehabilitated Buildings	Total Number of Dwelling Units With the 1st Alternative
2	107	552	659
3	160	552	712
4	214	552	766
5	267	552	819
6	320	552	872

The 2nd Alternative

The analysis of every block with its range of possibilities will take into consideration the maximum height in every block and the conversion of obsolete manufacturing buildings into multi-use properties that include a high percentage of residential use.

Block 1

Block 1 is not an integral part of the Chinatown District, but being on its edges, it could be included in it (see Map No. M.C.5.b.) The total building area in C/D condition is 300,000 gross building square feet. For nonresidential uses, the first two to four stories will be used. The total residential development potential will be 126,000 square feet or 126 dwelling units.

Block 2

The total vacant lot area is 11,184 square feet. Using a 0.6 footprint area and a maximum of 8 floors, the gross building area will be 53,683 square feet (FAR = 4.8). Using the first floor for retail, the residential potential will be 47,000 square feet or 47 dwelling units. The total net residential building area in C/D condition is 221,000 gross building square feet. The first 2 to 4 floors will be for commercial use. The other floors, or 130,000 square feet, will be for residential use or 130 dwelling units. The total residential development potential for all the block will be 177 dwelling units.

Block 3

The total vacant lot in this block is 15,913 square feet. The feasible lot area for residential use is only 40,500 square feet. Using a 0.6 footprint area, 8-floor height, the residential building area will be 50,000 square feet, or 50 dwelling units (FAR = 3.1). The total net residential building area in C/D condition is 355,000 square feet. Using the first 2 floors for commercial use leaves 234,000 square feet for residential use or 234 dwelling units. Adding floors to existing buildings (on Beach Street) of 1 or 2 stories will add, for a 60-feet height, another 23,000 square feet, or 23 dwelling units. The total residential development potential will be 307,000 square feet, or 307 dwelling units.

Block 4

The total vacant lot area is 11,000 square feet. Using a 0.6 footprint area and 6-stories building, the gross building area is 40,000 square feet. Using the ground floor for retail, the residential development potential will be 33,000 square feet, or 33 dwelling units. The total net residential building area in C/D condition is 104,000 square feet. Using the first floor for commercial use, the building area for residential use will be 85,000 square feet or 85 dwelling units. The total residential development potential in Block 4 will be 118,000 square feet, or 118 dwelling units.

Block 5

The vacant lot area is 15,000 square feet. Adding the lots of 3 buildings in D/E condition, the total lot area will be 19,000 square feet. With a 0.6 footprint area and 4-stories height, the residential development potential will be 46,000 square feet, or 46 dwelling units.

Block 6

The total vacant area is 43,000 square feet. Two other buildings on Washington Street occupy another 8,700 square feet. The total 52,000 square feet of vacant lot are a potential for 250,000 square feet of building area for residential use or 250 dwelling units.

Table 23

TOTAL NUMBER OF DWELLING UNITS
(2nd Alternative)

Block No.	Residential Development Potential in Square Feet	Number of Dwelling Units
1	126,000	126
2	177,000	177
3	307,000	307
4	118,000	118
5	46,000	46
6	250,000	250
Total	1,024,000	1,029

As seen in Table 23, the residential development potential in the Chinatown District is 1029 dwelling units and includes "infill" buildings and rehabilitation and conversion in residential uses.

LEATHER DISTRICT

The Leather District

The 1st Alternative

a. Vacant Lots

The total vacant lot area is 28,000 square feet, including 12 small lots on Kneeland Street. With a footprint area of 0.8 the Gross Floor Area will be as shown in the following table:

Table 24

NEW BUILDING ON VACANT LOTS

Number of Stories for Apartment Use *		Gross Floor Area on Vacant Lots	Number of Dwelling Units	Floor Area Ratio
6	(5)	112,000	112	5.0
7	(6)	134,400	134	5.7
8	(7)	156,800	157	6.6
10	(9)	201,600	202	8.2
11	(10)	224,000	224	9.0
14	(13)	291,200	291	11.4

* The real height available for residential use.

b. Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of Gross Floor Area (GFA) will be as shown in the following table:

Table 25

EXISTING BUILDINGS

Building Condition	Lot Area in Square Feet	Gross Floor Area for Residential Use (2 Floors For Commercial Use)	Total Gross Floor Area Mixed Use	FAR
C	25,000	90,000	140,000	5.6
D	47,000	270,000	363,000	7.7
E	2,000	10,000	10,000	5.0
Total	74,000	370,000	513,000	

Table 26

TOTAL NUMBER OF DWELLINGS

No. of Stories	Dwelling Units on Vacant Lot "Infill"	Number of Dwelling Units In Rehabilitated Buildings	Total Residential Development Potential in Dwelling Units
6	112	370	482
7	134	370	504
8	157	370	427
10	202	370	572
11	224	370	594
14	291	370	671

As shown in Table 26, the residential development potential of existing buildings is 370,000 square feet of Gross Floor Area, or 370 dwelling units. The total number of residential development potential in dwelling units will be between 480 and 670 units. This 1st alternative did not take into consideration demolishing buildings and development of big projects. It considered that all the rehabilitation will be for residential use.

The 2nd Alternative

Since the purpose of this analysis is to check the maximum residential development potential, all the vacant lots will be considered for residential use. For the same reason all the buildings in C/D/E condition will be suitable for this analysis. The technical and economic feasibility of the buildings for residential use will be analyzed in another part of the work.

Block 2

The only building in "C" condition has a 40,000 building square feet area. Using the first 2 floors for commercial use, leaves 24,000 square feet for residential conversion, or 24 dwelling units.

Block 3

The vacant lot area is only 2,800 square feet, on two sites. The maximum building area (6 stories high and 0.8 footprint area) will be 10,000 square feet and for residential use 8,400 square feet. But these sites are too small for setting up isolated buildings, so that their real potential of 8 dwelling units could be taken into consideration only as additions to the adjacent buildings. The residential rehabilitation potential of buildings in C/D/E condition is 118,000 square feet. Using the first two floors for commercial use in most of the buildings, the residential rehabilitation potential will be 88,000 square feet, or 88 dwelling units.

Block 4

The vacant lot area is 7,060 square feet. With a 0.8 footprint area and 6-stories height, the gross building area will be 34,000 square feet, or 34 dwelling units. The gross building square feet area of buildings in C/D condition is 143,000 square feet. Using the first two or three floors for commercial use, the residential rehabilitation potential will be 113,000 square feet, or 113 dwelling units.

Block 5

The vacant lot area is 1,896 square feet. With a height of 6 stories and a footprint area of 0.8, the building area will be 11,400 square feet. The residential development potential will be 7,600 square feet, or 8 dwelling units. The only building in "D" condition has 57,000 building square feet. Using the first 2 floors for commercial use, leaves for residential use 43,000 square feet, or 43 dwelling units.

Block 6

The total vacant lot area is 13,000 square feet. With a footprint of 0.8 and a 12-stories height, the gross building area will be 182,000 square feet. Using for commercial use the first two stories, the residential development potential will be 152,000 square feet or 152 dwelling units. The Essex Hotel, if converted into dwelling units, has 113,000 square feet for residential use, or 113 dwelling units.

The total residential development and rehabilitation potential in the Leather District is 475 dwelling units.

The Leather District

The Residential Development Potential = 475 Dwelling Units.

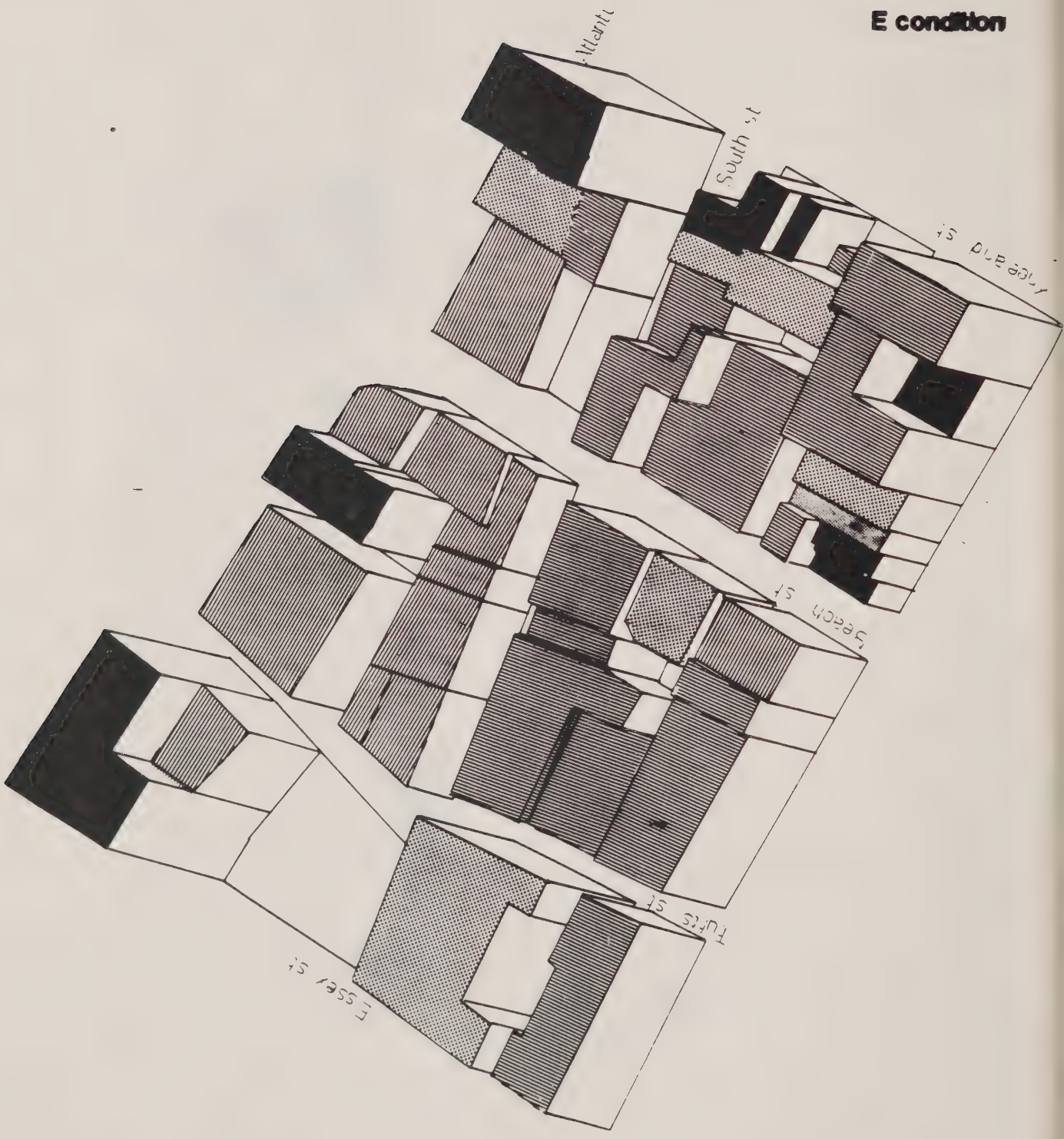
VACANT LAND

Vacant Lots

LEATHER DISTRICT

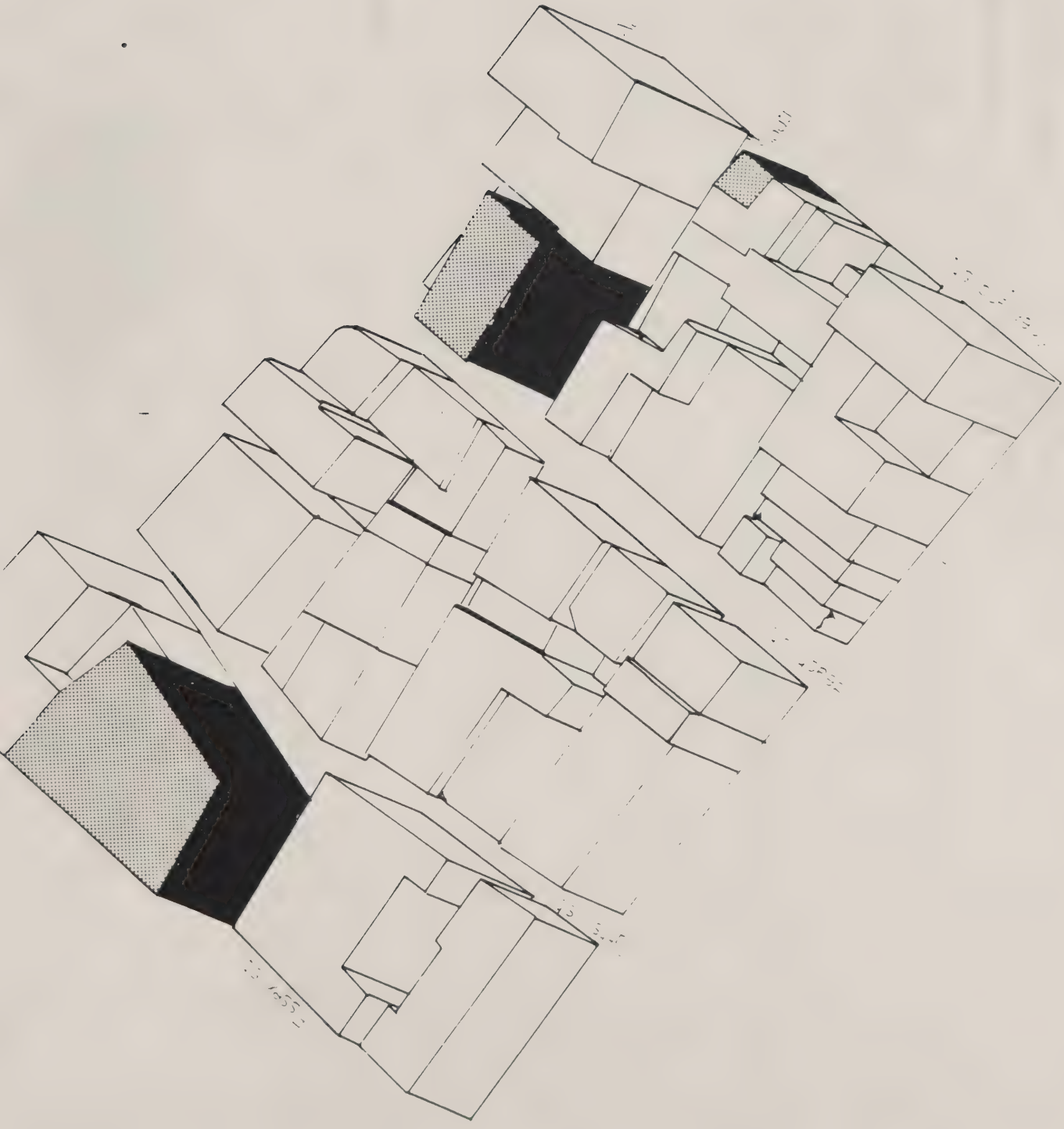
BUILDING CONDI
(from B.R.A. surv

A/B condition
C condition
D condition
E condition



M.C. 6.c.

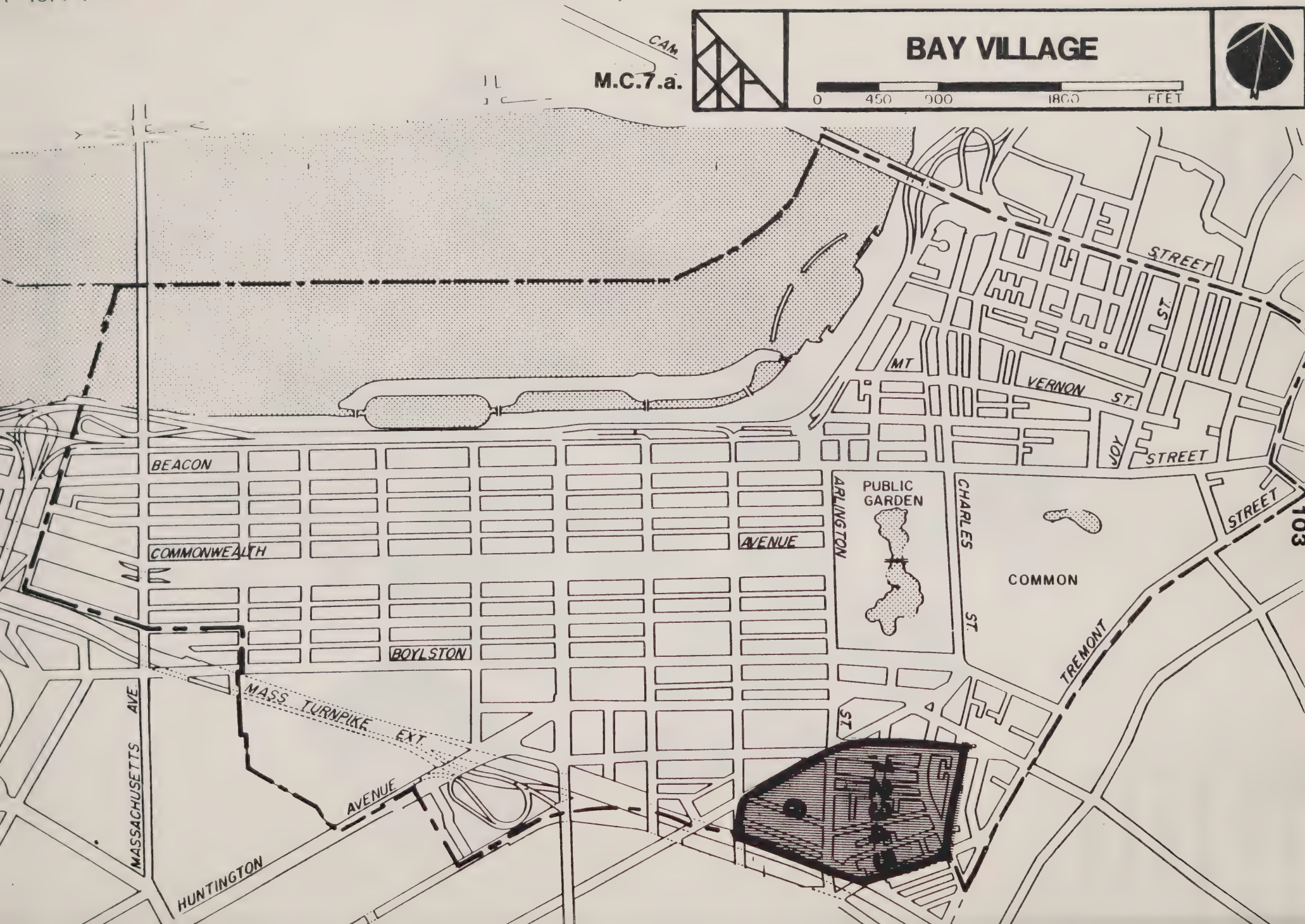
LEATHER DISTRICT



M.C.6.d.

LEATHER DISTRICT

A–1914 (b)


BAY VILLAGE
0 450 900 1800 FEET
M.C.7.a.
CAM
STREET
ST
MT
VERNON ST.
JOY
STREET
BEACON
PUBLIC GARDEN
ARLINGTON
CHARLES ST.
COMMON
STREET
103
COMMONWEALTH
AVENUE
BOYLSTON
MASS TURNPIKE EXT
AVENUE
MASSACHUSETTS AVE
HUNTINGTON
TREMONT
ST.

The Bay Village District

The 1st Alternative

a. Vacant Lots

The district can be divided into three large blocks: between Charles St South and Church Streets; between Church and Arlington Streets; between Arlington Street and Columbus Avenue.

The total vacant area is 77,000 square feet. With a footprint area of 0.6, the useful lot area will be 46,300 square feet. Using all the "infill" buildings for residentuse, the maximum number of dwellings will be 278 units. This number includes the use of vacant lots near the Turnpike Expressway and other isolated lots.

Table 27

NEW BUILDINGS ON VACANT LOTS

Number of Stories	Gross Floor Area on Vacant Lots	Number of Dwelling Units	F.A.R
2	92,600	93	1.2
3	138,900	139	1.8
4	185,200	185	2.4
5	231,500	232	3.0
6	277,800	278	3.6

b. Existing Buildings

Concentrating on buildings in C/D/E condition, only a few of them are not for residential use. Their total gross building area is 66,000 square feet, which means 66 dwelling units.

The maximum residential development potential in the district will be 344 dwelling units.

The 2nd Alternative

In the blocks between Charles Street South and Arlington Street there are a large number of vacant lots and buildings in C/D/E condition. If the vacant lots on Tremont Street will remain open space, the useful vacant lot area will be 60,300 square feet. With a 0.6 footprint area and 4-stories height, the building area will be 144,000 square feet. Rehabilitating nonresidential buildings in C/D/E condition and converting them to residential will add another 77,000 square feet. The total residential development potential will be 221 dwelling units.

The 3rd Alternative

This possibility will give: (1) To build a new residential block on the lot area of Stuart, Church and Piedmont Streets, with a 16,000 square feet of lot area. Using a 0.6 footprint area and an average of 6-stories height, the gross building area will be 60,000 square feet or 60 dwelling units (FAR=3.7). (2) To build a new residential block on the lot area of Broadway, Melrose Street and Charles Street South. It has a lot area of 8,100 square feet, and with a 0.6 footprint area and 6-stories height, it has 23,000 building square feet, which means 23 dwelling units (FAR=3.5). (3) To build a new residential block between Edgerly Place and Arlington Street, including the Adult Educational Center. The total lot area is 17,940 square feet. With a 0.6 footprint area and a maximum height of 6-stories, the total building area is 65,000 square feet. (4) To build a new residential building between Arlington Street and the French Catholic Church, on a lot area of 19,900 square feet. With a 0.6 footprint area and 6-stories height, the building area will be 71,000 square feet. (5) Setting up a new

residential block on the corner of Columbus Avenue, Isabella and Cortes Streets. This will include the building at 27 Cortes. The total lot area is 13,200 square feet. With a 0.6 footprint area and 5-stories height, the building area will be 40,000 square feet. Setting up another building of 5 stories on 275 Columbus Avenue, it will add another 15,000 square feet of building area. (6) Using the vacant lots on Tremont Street, it will add another 17,700 square feet of lot area, or 42,000 gross building area for residential use.

With the 3rd alternative, the maximum building square feet of "infill" will be 322,000 square feet or 322 dwelling units.

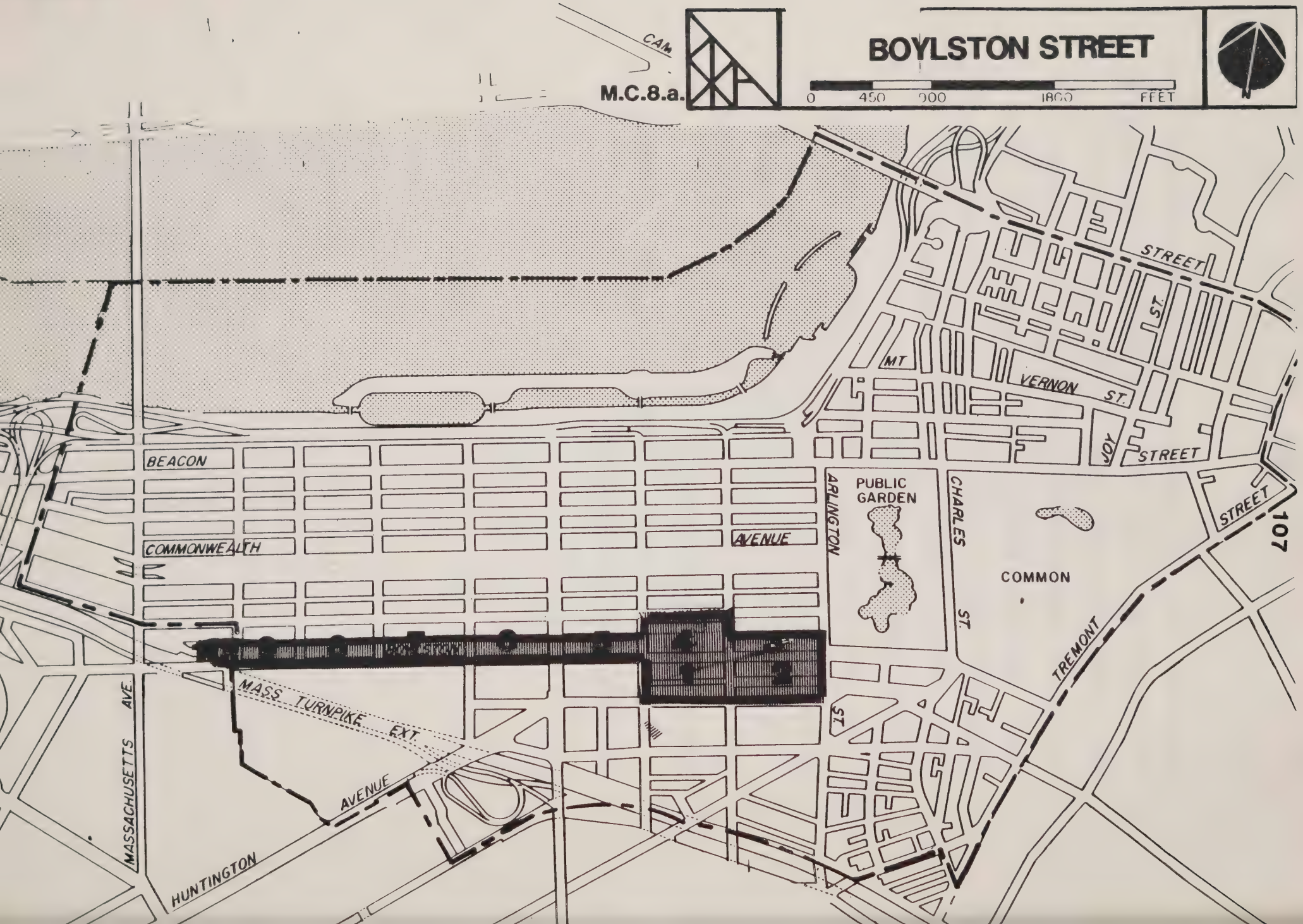
Adding rehabilitation of nonresidential buildings (in C/D/E condition) and converting them to residential use, the building square feet area will 48,000 or 48 dwelling units.

With the 3rd alternative, the maximum residential development potential will be 370 dwelling units.

M.C.8.a.

BOYLSTON STREET

0 450 900 1800 FEET



Boylston Street

a. Vacant Lots

Excluding the new project on the corner of Boylston and Gloucester Streets, the only vacant lot is occupied by a gas station, 807 Boylston Street at the corner of Fairfield. The lot area is 6,740 square feet, and with a 0.7 footprint area and maximum height of 6 stories, the total building area will be 28,00 square feet. Using the ground floor for commercial use leaves 24,000 square feet for residential use, or 24 dwelling units.

b. Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of gross building area will be as shown in the following table:

Table 28

TOTAL NUMBER OF DWELLINGS

Building Condition	Lot Area In Square Feet	G.F.A. for Residential Use in Square Feet	Total G.F.A For Mixed Use	F.A.R.
C	72,700	76,000	147,000	3.4
D	23,800	38,000	66,000	2.7
E	12,000	19,000	46,000	3.8
Total	108,500	133,000	359,000	

The number of dwelling units in rehabilitated buildingswill be 133 units. The total number of dwelling units for residential development will be 157 units.

The total gross floor in C and D condition is larger than shown in Table 28. The commercial buildings in fair and poor condition that are fully-occupied by commercial use now (as 330 Boylston Street, 420 Boylston Street) were not taken into consideration for conversion to residential units. Buildings in A/B condition, although they also could be converted to residential use, were also not counted.

BUILDING CONDITI

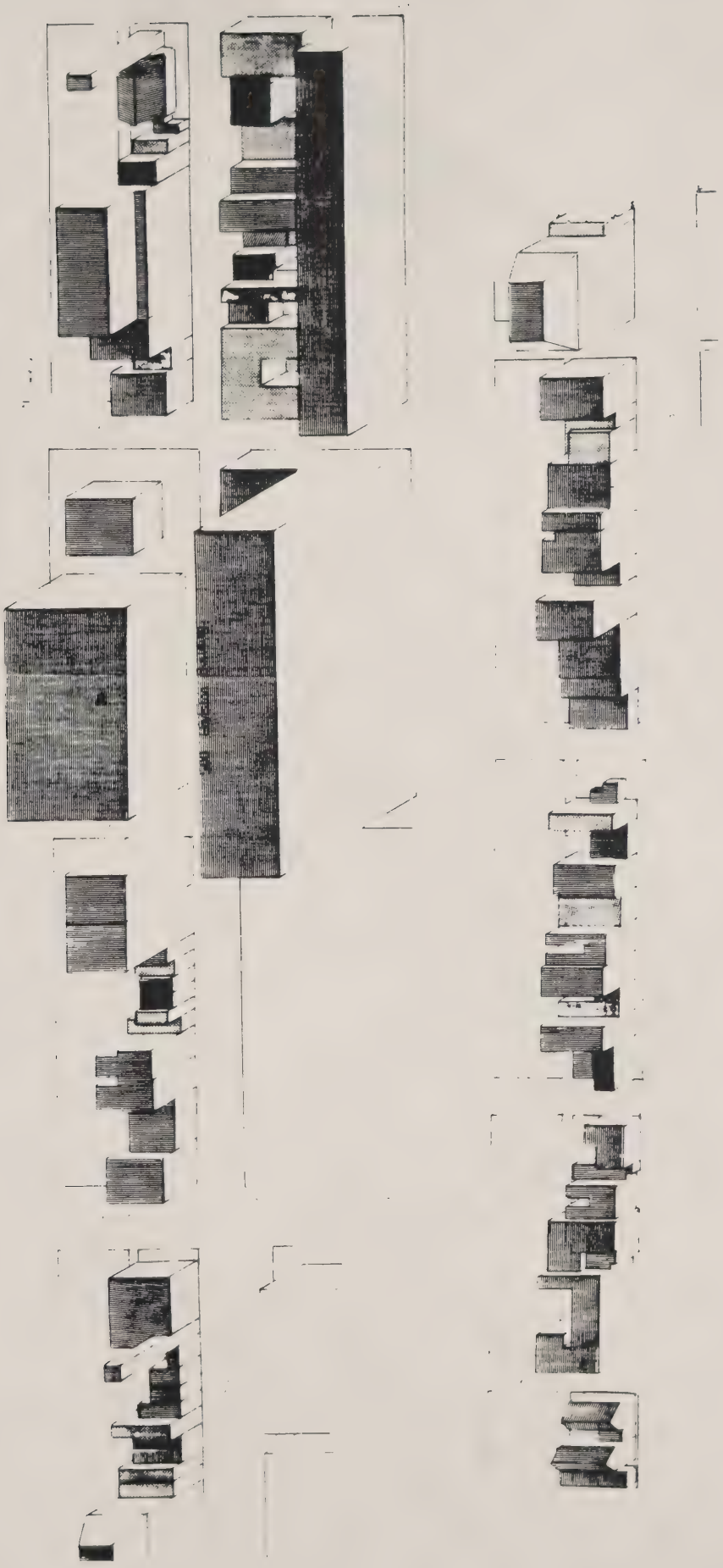
(from B.R.A. survey

A/B condition

C condition

D condition

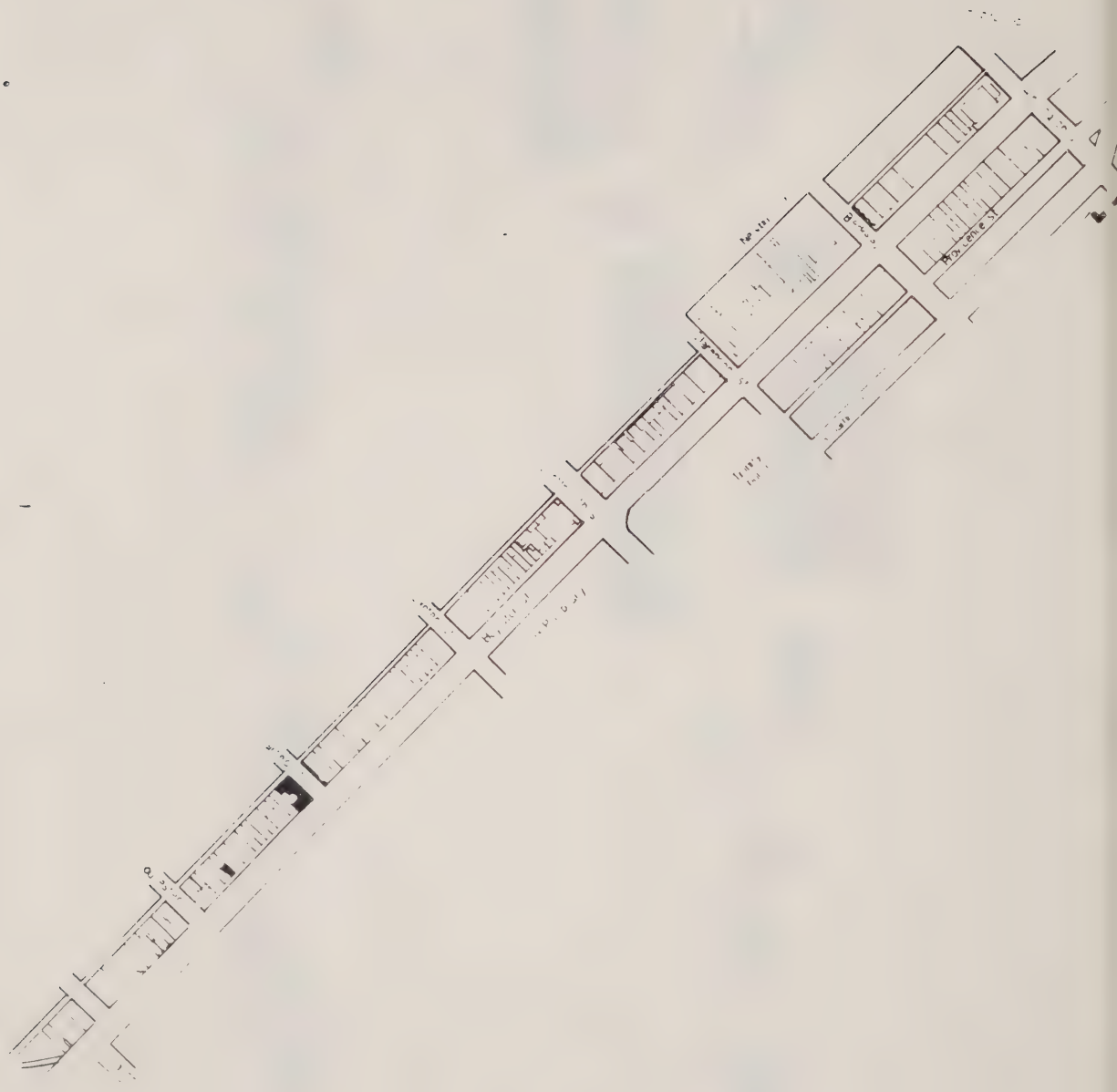
E condition



BOYLSTON STREET

VACANT SPACE

Vacant lots



M.C.8.c.

BOYLSTON STREET

M.C.9.a.

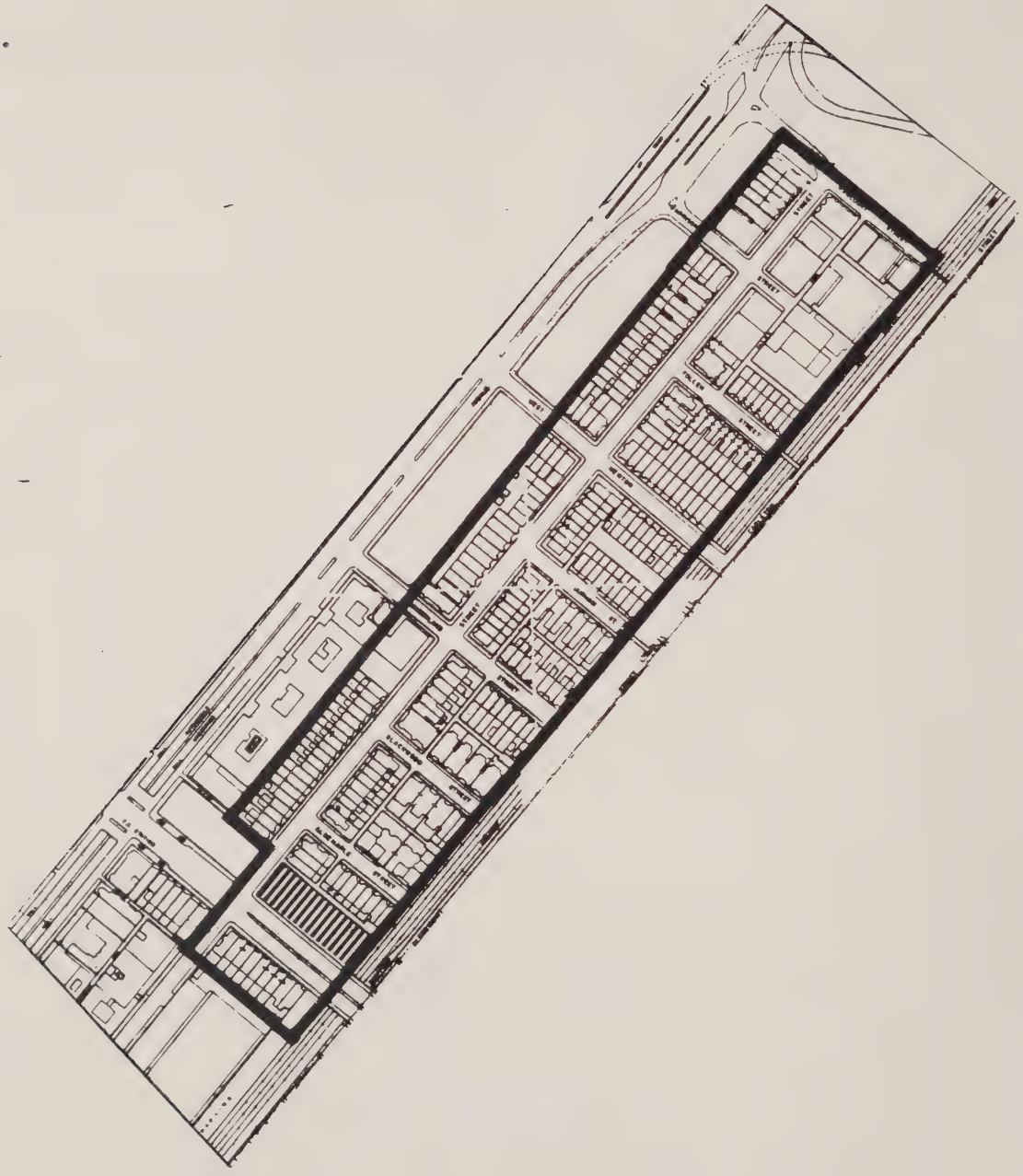
ST.BOTOLPH STREET

St Botolph District

The St. Botolph District is practically one street and short streets around it. The only vacant lot is on the corner of Massachusetts Avenue and St. Botolph Street and its residential development potential is 40 units.

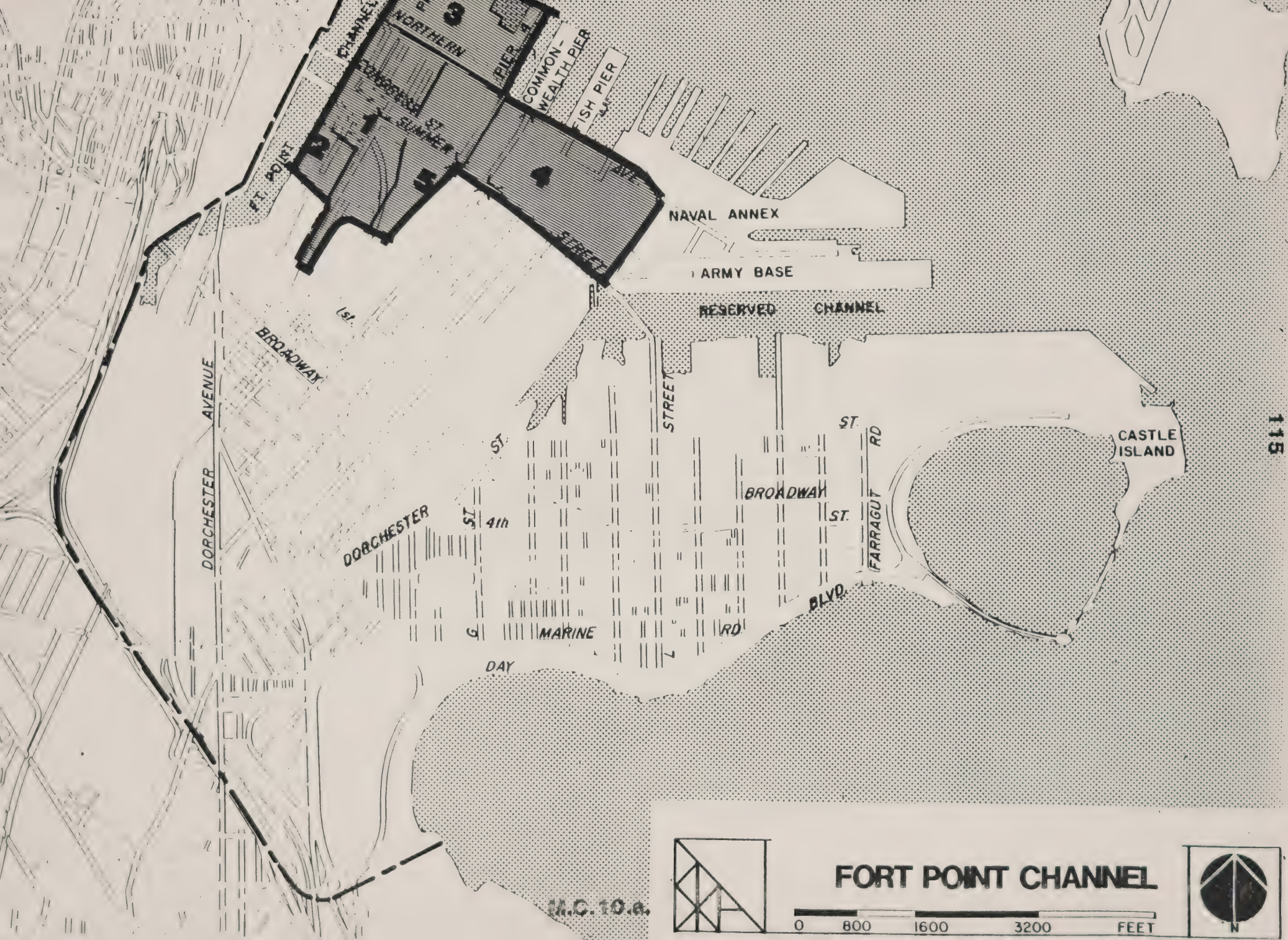
VACANT LAND

Vacant Lots



M.C.9.b.

ST.BOTOLPH STREET


NORTHERN AVE. BRIDGE
CHANNEL
NORTHERN AVE.
PIER
COMMONWEALTH PIER
FISH PIER
SUMMER ST.
SUMMER ST.
NAVAL ANNEX
ARMY BASE
RESERVED CHANNEL
1st
BROADWAY
DORCHESTER AVENUE
STREET
ST
CASTLE ISLAND
DORCHESTER ST.
41th
BROADWAY ST.
FARRAGUT RD
BLVD.
MARINE RD
DAY
FORT POINT CHANNEL
0 800 1600 3200 FEET
N
115
H.C. 10.a.

Fort Point Channel

The 1st Alternative

The Fort Point Channel is divided into 6 districts, as seen in Map No. : (1) Existing building area. (2) Washington-A Streets vacant area. (3) Piers 1,2,3,4 area. (4) Penn Central vacant area. (5) Northern Avenue-MassPort Authority area. (See Map No. M.C.10.a.)

1. Existing Building Area

The vacant land area between the buildings is 264,000 square feet. Using a 0.5 footprint area, the useful total lot area will be 132,000 square feet. The maximum number of dwelling units will be as shown in the following table.

Table 29

NEW BUILDINGS ON VACANT LOTS

Number of Stories	G.F.A. on Vacant Lot	Number of Dwelling Units On Vacant Lots	F.A.R.*
6	792,000	792	3
8	1,056,000	1,056	4
10	1,320,000	1,320	5
12	1,584,000	1,584	6
14	1,848,000	1,848	7

* F.A.R.-only on lot area, excluding streets, etc.

b. Rehabilitation of Existing Buildings

Concentrating on buildings in C/D/E condition, the total number of gross building area will be as shown in the following Table 30.

Table 30

RESIDENTIAL REHABILITATION/CONVERTING POTENTIAL

Block No.	Building Condition	G.F.A. in Square Feet	Number of Dwelling Units
1	C	540,000	540
1	D	500,000	500
2	C	523,000	523
3	C	1,008,000	1,008
3	D	341,000	341
4	C	528,000	528
4	D	681,000	681
5	D	86,000	86
Total		4,207,000	4,207

The total number of dwelling units in the build-up area will be:

Table 31

MAXIMUM NUMBER OF DWELLING UNITS

Number of Stories	Number of Dwelling Units on Vacant Lots	Number of Dwelling Units in Converted Buildings	Maximum Number of Dwelling Units
6	792	4,207	4,999
8	1,056	4,207	5,263
10	1,320	4,207	5,527
12	1,584	4,207	5,791
14	1,848	4,207	6,055

In the build-up block, the maximum number of dwellings will be 6,055 units. It is clear that this alternative means that all the potential building floor area will be used for residential units.

The 2nd Alternative

Taking into consideration only buildings in C/D condition and not used for manufacturing or studies, the potential for new housing will be the total of exist building gross area to be converted to resieential use and "infill" of vacant land. The gross floor area potential for conversion to residential use is 1,354,000 or 1,354 dwelling units of 1,000 square feet each.

Table 32

EXISTING BUILDINGS
(G.F.A.)

Street Number	Building Condition	Number of Floors	Gross Floor Area	Sprinkler
- Farnsworth				
11	D	5	44,020	Dry
Pittsburg				
26	D	5	34,670	None
32	D	6	56,000	Dry
19	D	3	35,200	Dry
27	C	5	36,000	None
29	C	5	48,000	None
Stillings				
5	C	6	52,800	Wet
29	C	1	9,170	None
33	C	1	7,890	None
Melcher				
11	C	6	55,200	Dry
27	C	6	54,600	Wet
A Street				
3191R	D	5	60,000	Dry
195	C	7	116,000	Dry
169	D	7	77,000	Wet & Dry
168-178	D	5	85,500	-
Necco Court				
6	D	6	53,000	Dry
5	D	6	53,000	Dry
Midiver				
22-38	C	6	177,000	Dry
40	D	7	77,000	Dry
10-16	C	5	88,400	Wet
Binford				
12-18	D	6	126,000	-
Total			1,354,000	

For the vacant land, the residential development potential is dependent on the F.A.R., the footprint ratio. Excluding build-up on internal lots without light and open views, the total vacant space for residential use will be 80,000 square feet. Using a footprint of 0.4, the useful land area will be 32,000 square feet. For an F.A.R. of 3.2, the residential development potential will be 256 dwelling units.

Table 33

BUILDINGS ON VACANT LOTS

Number of Floors	Floor Area	Gross Floor Area	Number of Dwelling Units	F.A.R.
5	32,000	160,000	160	2.0
6	32,000	192,000	192	2.4
7	32,000	224,000	224	2.8
8	32,000	256,000	256	3.2
9	32,000	288,000	288	3.6
10	32,000	320,000	320	4.0
12	32,000	384,000	384	4.8
14	32,000	448,000	448	5.6

Using a footprint of 0.5, the new dwelling units will be as shown in the following Table 34:

Table 34

BUILDINGS ON VACANT LOTS

Number of Floors	Floor Area	Gross Floor Area	Number of Dwelling Units	F.A.R.
5	40,000	200,000	200	2.5
6	40,000	240,000	240	3.0
7	40,000	280,000	280	3.5
8	40,000	320,000	320	4.0
9	40,000	360,000	360	4.5
10	40,000	400,000	400	5.0
12	32,000	384,000	384	4.8
14	32,000	448,000	448	5.6

Using the block average of 8 floors and a footprint of 0.5, the total number of residential units in the block will be 1,675 dwelling units.

2. Mt. Washington Street-A Street Vacant Area

The total vacant land area is 536,000 square feet or 12.4 acres. Taking into consideration a mixed residential/commercial project, the residential gross foot area will be 80 percent. Using a foot print of 0.2/0.4/0.5 and a maximum F.A.R. of 4, the residential development potential will be as shown in the following table:

Table 35

NEW BUILDINGS

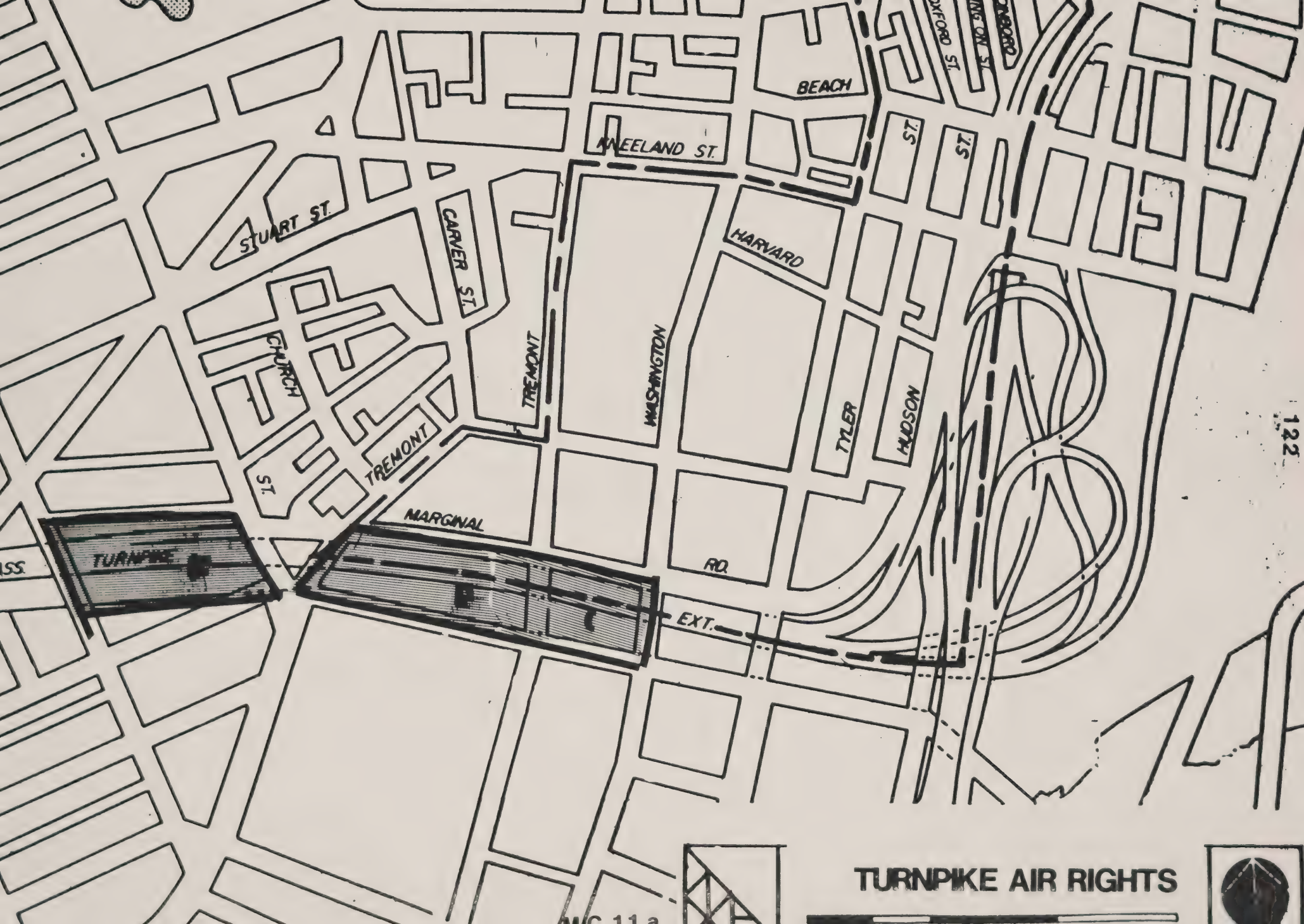
Number of Floors	Floor Area	Gross Building Area	Gross Residential Building Area (80%)	Number of Dwelling Units	F.A.R.
	0.2-107,200	536,000	428,800	429	1.0
5	0.4-214,400	1,072,000	857,600	858	2.0
	0.5-321,600	1,608,000	1,286,400	1,286	3.0
	0.2-107,200	643,200	514,560	515	1.2
6	0.4-214,400	1,286,400	1,023,120	1,023	2.4
	0.5-321,600	1,923,600	1,543,680	1,544	3.6
	0.2-107,200	750,400	600,320	600	1.4
7	0.4-214,400	1,500,800	1,200,640	1,201	2.8
	0.5-321,600	2,251,200	1,800,360	1,901	4.2
	0.2-107,200	857,600	686,080	686	1.6
8	0.4-214,400	1,715,200	1,372,160	1,372	3.2
	0.5-321,600	2,572,800	2,058,240	2,058	4.8
	0.2-107,200	1,072,000	857,600	858	2.0
10	0.4-214,400	2,144,000	1,715,200	1,715	4.0
	0.5-321,600	3,216,000	2,572,800	2,573	6.0
	0.2-107,200	1,286,400	1,023,120	1,023	2.4
12	0.4-214,400	2,572,800	2,058,240	2,058	4.8
	0.5-321,600	3,859,200	3,087,360	3,087	7.2
	0.2-107,200	1,500,800	1,200,640	1,207	2.8
14	0.4-214,400	3,001,600	2,401,280	2,401	5.6
	0.5-321,200	4,502,400	3,601,320	3,602	8.4

As seen in Table 35, the residential development potential, using a F.A.R. of 7 and footprint of o.6, there are 3,087 dwelling units.

3. Piers 1, 2, 3, 4

Using the master plan presented by Jung/Brannen Associates, the maximum residential development potential will be 1,346 dwelling units. Taking into consideration for use another 0.4 million square feet for housing (from the potential 1.4 million square feet of office) means adding another 400 dwelling units. The total residential development potential will be 1,746 units.

4 & 5. These areas are designated for commericial use.


BEACH
KNEELAND ST.
STUART ST.
CARVER ST.
HARVARD
CHURCH
ST.
TREMONT
TREMONT
WASHINGTON
TYLER
HUDSON
MARGINAL
RD.
TURNPIKE
EXT.
TURNPIKE AIR RIGHTS

Turnpike Air Rights

Parcel D

The assumed lot area of Parcel D is 181,000 (or 4.16 acres) square feet. If all the parcel is designated for residential use, the following assumptions were taken into consideration: buildings with heights of 5 or 6 stories, a footprint area (F.P.A) of 0.4, 0.5 and 0.6. The following tables show the various alternatives:

Table 36

RESIDENTIAL POTENTIAL

	Table 36A-0.4 F.P.A.*			Table 36B-0.5 F.P.A.		
No. of Stories	Gross Foot Area (G.F.A) In Sq. Feet	No. of Dwelling Units	F.A.R.	G.F.A. in Sq. Ft.	No. of Dwelling Units	F.A.R.
3	271,520	271	1.5	217,212	217	1.2
4	362,020	362	2.0	289,616	290	1.6
5	452,530	452	1.5	362,000	362	2.0
6	543,036	543	3.0	434,424	434	2.4
7	633,542	633	3.5	506,824	507	2.8
8	724,048	724	4.0	579,232	579	3.2

* F.P.A.=72,404 sq. ft.

* F.P.A.=90,506 sq. ft.

Table 36C-0.6 F.P.A.*

No. of Stories	Gross Foot Area (G.F.A.) In Sq. Feet	No. of Dwelling Units	F.A.R.
3	325,821	326	1.8
4	434,428	434	2.4
5	543,035	543	2.4
6	651,642	651	3.6
7	760,249	760	4.2
8	868,856	869	4.8

* F.P.A.=108,607 sq. ft.

The maximum residential potential will be 434 dwelling units (with a maximum height of 6 stories, F.P.A. of 0.5 and F.A.R. 2.4.

Parcel C

The lot area of Parcel C is 123,000 square feet (or 3 acres). Using a maximum height of 14 stories and a footprint area of 0.5, the residential potential will be only 50 percent of the G.F.A. as shown in the following table.

Table 37

RESIDENTIAL POTENTIAL

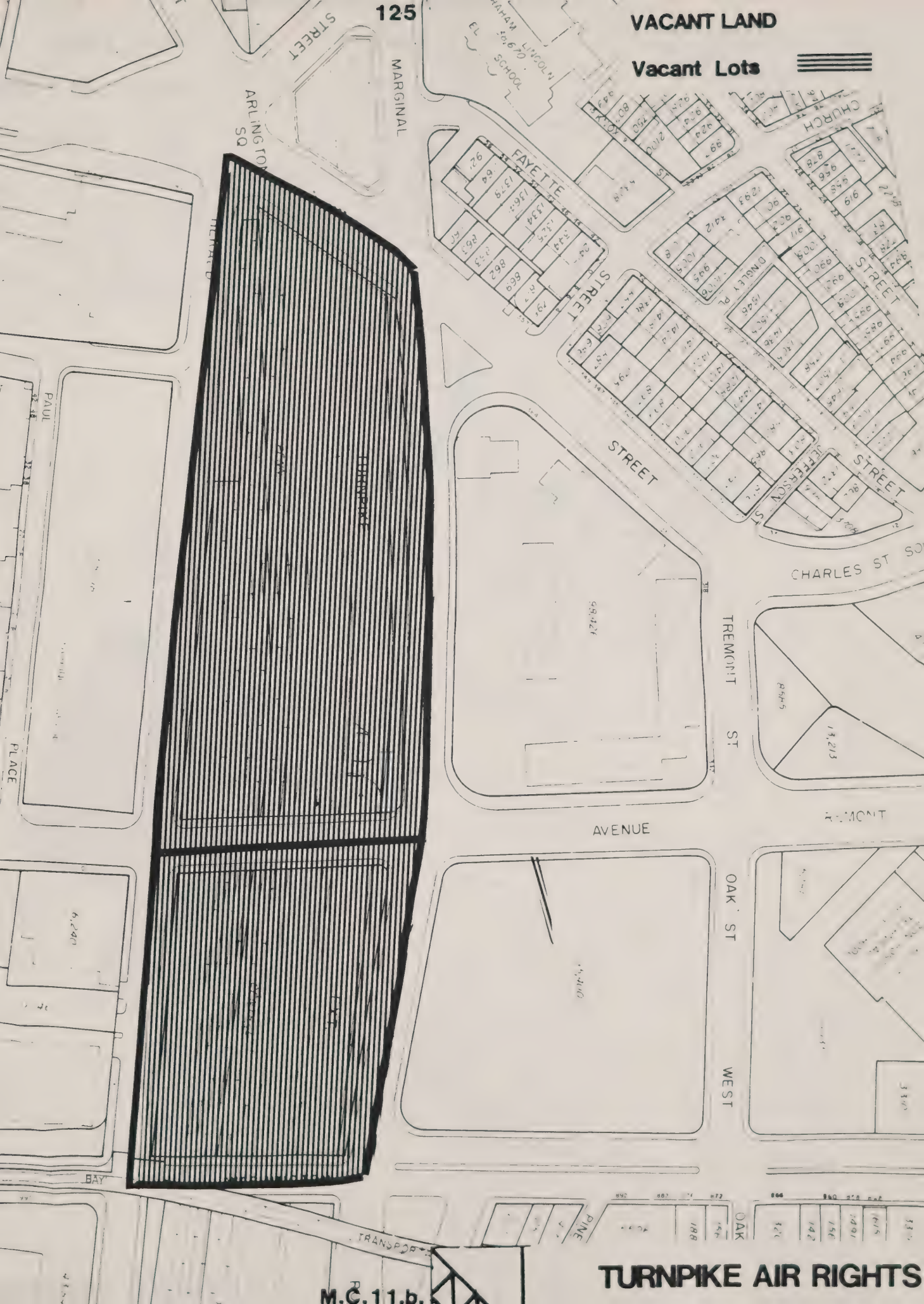
No. of Stories	G.F.A. In Sq. Ft.	No. of Dwelling Units	F.A.R.
6	193,500	194	1.50
7	225,750	226	1.75
8	258,000	258	2.00
9	190,250	290	2.25
10	322,500	323	2.50
12	387,000	387	2.75
14	451,500	452	3.50

The maximum number of dwelling units will be 450 units.

Parcel Massachusetts Avenue/Boylston Street

The lot area of this parcel is 44,128 square feet. Using a maximum height of 14 stories and a footprint area of 0.6, the Gross Foot Area will be 370,675 square feet and a F.A.R. = 8.4. Using 80 percent for residential use, the residential development potential will be 300 dwelling units. (See Map M.C.11.c.)

The Residential Development Potential will be 1,180 dwelling units.


125
VACANT LAND
Vacant Lots
MARGINAL
ARLINGTON SQ
STREET
FAYETTE
STREET
CHURCH
STREET
DUDLEY PL
STREET
JEFFERSON ST
STREET
CHARLES ST SO
TREMONT ST
AVENUE
TREMONT
OAK ST
WEST
PAUL
PLACE
BAY
PINE
OAK
TRANSPORT
TURNPIKE AIR RIGHTS
M.C.11.b.

TOPOGRAPHIC AND PLANIMETRIC

126

VACANT LAND

Vacant Lots

HEREFORD

MASSACHUSETTS AVENUE

ALLEY

RAMP

NEWBURY

PUBLIC

MASSACHUSETTS AVE. STATION

M.T.A.

CAMBRIA

ST. CECILIA

SCOTIA

CHARLES NEWCOMB SQUARE

STREET

M.C. 11.c.

TURNPIKE AIR RIGHT

Residential Development Potential

The results of the first analysis to check the residential development potential of some Downtown districts are shown in the following table:

Summary Table

RESIDENTIAL DEVELOPMENT POTENTIAL OF SOME DOWNTOWN DISTRICTS

District	Number of Dwelling Units	Districts Not Feasible for Residential Use	Districts Feasible for Residential Use
1. Bulfinch Triangle	900	x	
2. Custom House District	310	x	
3. Ladder (Court-West)	220	½	½
4. Theatre District	1,310		x
5. Leather District	475		x
6. Chinatown	1,025		x
7. Bay Village	370		x
8. Boylston Street	160		x
9. St. Botolph Street	40		x
10. Fort Point Channel	6,500		x
11. Turnpike Air Rights	1,130		x
Total	11,280		

D. GENERAL NOTES AND REMARKS

1. A Short Analysis of the Findings

As seen in the first analysis of the Residential Development Potential in Downtown (R.D.P.D.) the existing potential has a range of intensity in the various districts. The districts in Downtown could be divided into 4 groups.

a. Existing Residential District-Bay Village, St. Botolph Street, Chinatown

b. Nonresidential District-Existing Residential Potential and Meeting City Goals of Residential/Commercial Development-Leather District, Theatre District, Fort Point Channel, Boylston Street

c. Nonresidential District-Existing Residential but Do Not Meet City Goals of Only Commercial Development-Custom House District, Bulfinch Triangle District

d. Nonresidential District-Do Not Have Residential Potential-Tremont District (Court/West Streets)

2. Issues Upcoming

The first task in evaluating Options of Residential Development Potential in Downtown (R.D.P.D.) is to have all the base data for all assessment categories. It includes:

City Goals and objectives for Revitalization are:

- increasing the number of new housing units, in new and old buildings;
- diversification of housing opportunities;
- property value upgrading.

Area Description/Major Physical Assets and Constraints:

- area extension and boundaries of the districts;
- existing surroundings, influences on area;
- major changes in population area.
- description of structure condition and adaptability;
- area amenities;
- locational and access advantages;
- community services;
- infrastructure conditions;
- opportunities for treating area as a whole.

Regulatory Opportunities and Constraints regarding residential use; existing zoning provisions and opportunities for changing.

Economic and Market Overview - The existing and anticipated changes in demographics and economic factors

- population, household composition
- disposable income, employment and jobs
- residential characteristics

Investment Climate Overview - Financial potential for private investors in the residential development.

Social Concerns Interests-Identify special interest groups that are likely to be impacted by development for residential use.

Catalytic Potential-how the proposed development will impact adjacent areas in terms of:

- jobs
- taxes
- area image.

To compare the Alternatives of Residential Development Potential means to analyze the type of impact items that are most important.

3. Next Steps - Analysis of Economic Feasibility

Introduction

This chapter will analyze only the districts which have a potential for residential development and have not major constraints regarding this residential use. Then it will analyze the options of condominiums and apartments.

Each option will be described by:

a. Magnitude and Character for Each Alternative

- Number of units or square footage of suitable space in both new and rehabilitated buildings;
- anticipated construction costs;
- expected sales or rental rates.

b. Financial Feasibility

1. The Financial Pro Forma
   - Development Costs
   - Revenues and Expenditures
2. After Tax Cash Flows
3. Effect of Public Actions on Financial Feasibility

c. Economic Impacts

1. Economic Costs
2. Economic Benefits

d. The Resultant Environment

1. Cultural Significance
2. Activities in the Area

e. Catalytic Potential

f. Opportunities Foregone

g. Evaluation and Selection

Case Study

The cases that will be analyzed will be buildings in C/D/E condition, without known possibilities of near development, and "infill" on vacant lots.

1. Bulfinch Triangle District

   A. Buildings: 49 Causeway Street/147 Lowell Square
   115 Merrimac Street/16 Lancaster Street
   180 Canal Street/127 Causeway Street
   264 Friend Street

   B. Vacant Lots: 120-126 Canal Street

2. Custom House District

   A. Buildings: 153 Milk Street/32 Battery March
   64-66 Broad Street
   20 Custom House Street

   B. Vacant Lots: Block 7 (Broad, Milk, India, Custom House Streets)
   49 India Street

3. Tremont District

   A. Buildings: 69 Bromfield Street/101 Tremont Street
   96 Tremont Street/Bosworth Street
   33 Temple Street
   41 West Street
   130 Tremone Street/Winter Street

4. Theatre District

   A. Buildings: 177 Tremont Street
   27-39 Stuart Street
   158 Boylston Street
   8 Kneeland Street
   5 Essex Street

   B. Vacant Lots: 146 Boylston Street (Liberty Block)

5. Chinatown District

A. Buildings: 85-91 Essex Street
70 Beach Street/37 Edinboro Street
42 Beach Street/33 Harrison Avenue
109 Edinboro Street/107 Essex Street
866 Washington Street/ Oak Street

B. Vacant Lots: 35 Essex Street (Liberty Block)

6. Leather District - None

7. Bay Village - None

8. Boylston Street District

A. Buildings: 889-883 Boylston Street/57 Gloucester Street
671 Boylston Street
661 Boylston Street
557 Boylston Street

9. St. Botolph Street - None

10. Fort Point Channel

A. Buildings: 5 Melcher Street/253 Summer Street
304 A Street/Necco Court
174 A Street
38 Pittsburgh Street

B. Vacant Lots: 338 Congress Street/Farnsworth Street

11. Turnpike Air Rights

B. Vacant Lots: Parcel D.

DATA SOURCES FOR IMPACT ASSESSMENT

Impact	Measure-	Data Sources
1. Property Values	Change in values	
2. Taxes	Change in taxes: property, sales, income, etc.	
3. Effect on funds as a result of public incentives	Tax abatement Amount of city assistance, infrastructure, landscaping	
4. Employment	Change in number of people employed Change in type of employment	
5. Effect on Personal Income	Change in income	
6. Effect on Housing Opportunities	Change in number of housing units by type: rental owner-occupied Other Changes	
7. Effect on Image of the Area	Change in number of people in area at various times of day Change in level and type of activity in area Change in visual image of buildings Change in image of area	
8. Change in Economic Activity in Other Areas	Change in small retail Change in property value	
9. Effect on Safety of Area	Change in Crime Rates	
10. Costs and Revenues Estimate for Financial Pro Forma	New Infill New Construction Rehabilitation Costs Building Maintenance Costs Rents/Sales Levels Interest Rates	

Sources: Economics of Revitalization by U.S.I. 1984.
Boylston Street Report. March 1985.
Field Survey. 1985.
Adaptive Use Book. 1984.
Downtown Crossing. 1984.
Theatre District Study. August 1980.
The Leather District Report. April 1980.
Fort Point Channel. S. Swaile, 1982.